

Editor 17/11/14

CU 491

County Council of Shropshire.

REPORT

BY THE

COUNTY MEDICAL OFFICER OF HEALTH

ON THE

**VITAL STATISTICS AND SANITARY CONDITION
OF SHROPSHIRE**

DURING THE YEAR 1913,

INCLUDING A

**SUMMARY OF THE ANNUAL REPORTS OF THE DISTRICT MEDICAL
OFFICERS OF HEALTH, AND A REPORT ON THE ADMINISTRATION
OF THE MIDWIVES ACT.**

JAMES WHEATLEY, M.D., D.P.H.

REWSBURY,

September, 1914.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30086516>

County Council of Shropshire.

REPORT

BY THE

COUNTY MEDICAL OFFICER OF HEALTH

ON THE

**VITAL STATISTICS AND SANITARY CONDITION
OF SHROPSHIRE
DURING THE YEAR 1913,**

INCLUDING A

**SUMMARY OF THE ANNUAL REPORTS OF THE DISTRICT MEDICAL
OFFICERS OF HEALTH, AND A REPORT ON THE ADMINISTRATION
OF THE MIDWIVES ACT.**

JAMES WHEATLEY, M.D., D.P.H.

IREWSBURY,

September, 1914.

INDEX.

TO PART I.

	PAGE		PAGE		PAGE
Acute Poliomyelitis ..	27	Hospital Accommodation ..	32, 67	Premature Births ..	14
Administrative County ..	6	House Accommodation ..	34	Privies (Conversion of) ..	43
Anthrax Order, 1910 ..	51	House Refuse (Disposal of) ..	46	Public Health (Tuberculosis)	
Atcham Combined District ..	66	Housing and Town Planning,		Regulations, 1912 ..	26
Bacteriological Examinations ..	31	etc., Act, 1909 ..	34	Puerperal Fever ..	19, 58
Births, Birth-rate ..	9, 10, 11	Improper Clothing of Infants,		Rainfall ..	65
Births Act, Notification of ..	30	etc. (deaths from) ..	14	Refuse—House (Disposal of) ..	46
Cancer ..	26	Infant Feeding (Teaching of) ..	56	Rivers Pollution Act ..	46
Cancer (death-rates from) ..	26	Infantile Mortality ..	12	Sanatorium for Consumptives ..	23
Are Committee ..	25	Infectious Diseases ..	15	Sanatorium—number ad-	
Cerebro-spinal Fever ..	27	Infectious Diseases (Notifica-		mitted ..	24
Closets (Water) ..	42	tion by School Teachers) ..	31	Scarlet Fever ..	15
Closets (earth) ..	42	Inspection ..	52	Scavenging ..	46
Confinements attended by ..		Isolation Hospitals ..	32, 67	School Children (Inspection	
Midwives ..	58	Males ..	6	of) ..	30
Consumption (Association for		Marriages ..	9	School Closure ..	30
the Prevention of) ..	25	Maternity Benefit (National		Sewage Disposal ..	44
Cowsheds and Dairies ..	48	Insurance Act) ..	64	Sewage Disposal, Eighth	
Dairies and Cowsheds Regu-		Measles ..	16	Report of the Royal Com-	
lations ..	50	Meat Inspection ..	51	mission on ..	46
Dairy Cattle (Inspection of) ..	48	Medical Help (Notification		Sewerage ..	44
Deaths (chief causes of) ..	15	of) ..	55, 56	Shelters for Tuberculous	
Deaths, Death-rates ..	11	Medical Inspection of School		Patients ..	24
Death-rates, crude and ..		Children ..	30	Shropshire Nursing Federation ..	63
corrected ..	12	Midwives Act ..	55	Small-pox ..	15
Death-rates, factors for cor-		Midwives, Inspection of ..	55	Small-pox, hospital accom-	
recting ..	9	Midwives reported to Local		modation for ..	33
Dental Caries, Prevention of ..	28	Supervising Authority ..	63	Steam Disinfectors ..	32
Diarrhoea ..	19	Midwives (Supply of) ..	58, 63	Still-births (Notifications of)	
Diphtheria ..	17	Midwives (Training of) ..	63		55, 57
Disinfection ..	32	Milk, Results of Analysis of ..	54	Teaching of Infant Feeding ..	56
Disinfectors, Steam ..	32	Milk and Cream Regulations ..	55	Tenements (particulars with	
Drainage ..	44	Milk and Dairies Bill ..	50	regard to) ..	37—39
Enteric Fever ..	18	Milk Supply ..	48	Tuberculosis ..	20, 67
Enteritis ..	19	Milk (Tuberculous) ..	50	Tuberculosis (Compulsory	
Errors of Feeding of Infants		Milk, Examination for dirt in ..	50	Notification of) ..	20
(Deaths from) ..	14	National Insurance Act ..	64	Tuberculosis Dispensaries ..	23
Excrement Disposal ..	42	Notification of Births Act ..	30	Tuberculosis, Nurse Inspectors ..	23
Factories and Workshops ..	52	Notifications from Schools ..	31	Tuberculosis Medical Officer ..	23
Factors for correcting death-		Nurses to visit Infectious Cases ..	17	Tuberculosis Order, 1913 ..	50
rates ..	9	Ophthalmia Neonatorum ..	27, 67	Typhoid Fever ..	18
Feeding and Care of Infants ..	56	Parturition (Accidents and		Vaccination ..	32
Females ..	6	Diseases of) ..	28	Water Supplies ..	40
Fines ..	43	Phthisis ..	20	Whooping Cough ..	17
Food and Drugs ..	53	Poliomyelitis (Acute) ..	27	Workshops ..	52
Fountain, Water Supply and ..	41	Pollution of Rivers ..	46		
Health Visitors (employment		Population ..	6—9		
of) ..	30	Populations of Districts ..	6—9		

TO PART II (DISTRICT REPORTS).

Atcham ..	67	Dawley ..	88	Oswestry R. ..	108
Bishop's Castle ..	71	Drayton ..	91	Shifnal ..	109
Bridgnorth U. ..	73	Ellesmere U. ..	92	Shrewsbury ..	111
Bridgnorth R. ..	75	Ellesmere R. ..	94	Teine ..	117
Burford ..	76	Ludlow U. ..	95	Wellington U. ..	118
Burbury ..	77	Ludlow R. ..	97	Wellington R. ..	120
Church Stretton U. ..	79	Newport U. ..	99	Wem U. ..	121
Church Stretton R. ..	82	Newport R. ..	101	Wem R. ..	122
Geobury Mortimer ..	84	Oakengates ..	104	Wenlock ..	124
Lun ..	86	Oswestry U. ..	106	Whitchurch U. ..	128
				Whitchurch R. ..	130

TO THE CHAIRMAN AND MEMBERS OF THE PUBLIC HEALTH
AND HOUSING COMMITTEE OF THE SHROPSHIRE
COUNTY COUNCIL.

GENTLEMEN,

I have the honour to present my Annual Report for 1913.

The general arrangement of previous reports has been continued in the present one. The second part of the report is a condensed summary of the reports for the various districts. In the first part each subject is dealt with as affecting the whole County.

A report is given on the administration of the Midwives Act.

The following are the duties of County Medical Officers of Health as prescribed by the Order of the Local Government Board, dated July 29th, 1910:—

- “(1) The Medical Officer of Health of the County shall inform himself as far as practicable
 “respecting all influences affecting or threatening to affect injuriously the public health
 “in the County. For this purpose he shall visit the several County districts in the
 “County as occasion may require, giving to the Medical Officer of Health of each County
 “district prior notice of his visit, so far as this may be practicable.
- “(2) The Medical Officer of Health of the County shall from time to time inquire into and
 “report upon the hospital accommodation available for the isolation of cases occurring
 “in the County.—
 “(a) of small-pox, and
 “(b) of other infectious diseases,
 “and upon any need for the provision of further hospital accommodation.
- “(3) The Medical Officer of Health of the County shall communicate to the Medical Officer of
 “Health of a County district within the County any information which he may possess
 “as to any danger to health threatening that district.
- “(4) The Medical Officer of Health of the County shall consult with the Medical Officers of
 “Health of County districts within the County whenever the circumstances may render
 “this desirable.

- “(5) If the annual or special reports of the Medical Officer of Health of a County district in the County shall not contain adequate information in regard to—
- “(a) the vital statistics of the district,
 - “(b) the sanitary circumstances and administration of the district, and
 - “(c) the action taken in the district for putting in force the provisions of the Housing of the Working Classes Acts, 1890 to 1909.
- “the Medical Officer of Health of the County shall obtain from the Medical Officer of Health of the County district such further information on those matters as the circumstances may demand.
- “(6) The Medical Officer of Health of the County shall, when directed by Us, or by the County Council, or as occasion may require, make a Special Report to the County Council on any matters appertaining to his duties under this Order.
- “(7) The Medical Officer of Health of the County shall as soon as practicable after the 31st day of December in each year make an Annual Report to the County Council up to the end of December on the sanitary circumstances, the sanitary administration and the vital statistics of the County.
- “In addition to any other matters upon which the Medical Officer of Health may consider it desirable to report, his Annual Reports shall contain the following sections :—
- “(a) a digest of all annual and special reports made by the Medical Officers of Health of all County districts within the County.
 - “(b) a section as to the isolation hospital accommodation available for each County district and as to the steps which should be taken to remedy any deficiencies which may exist.
 - “(c) a section on the administration of the *Housing of the Working Classes Acts*, 1890 to 1909, within the County.
 - “(d) a section on the *Water Supply* of the several County districts within the County ;
 - “(e) a section on the *Pollution of Streams* within the County and as to the steps for the prevention of pollution taken :—
 - “(i) by the *Local Authorities*, and
 - “(ii) by the *County Council* ;
 - “(f) a section on the administration within the County of the *Midwives Act*, 1902 ; and
 - “(g) a section on the administration of the *Sale of Food and Drugs Act*, 1875 to 1907, within that part of the County in which the County Council have jurisdiction for the purposes of those Acts.
- “(8) The Medical Officer of Health of the County shall send to Us two copies of his Annual Report and two copies of any Special Report ; he shall also send one copy of his Annual Report to the Council of every County district in the County and shall send three copies of any Special Report to the Council of every such County district affected by the Special Report.”

I am, Gentlemen,
Your obedient Servant,

JAMES WHEATLEY.

COUNTY HEALTH DEPARTMENT,
COUNTY BUILDINGS,
September, 1914.

PART I. THE ADMINISTRATIVE COUNTY.

POPULATION.

The population of the Administrative County in 1901 was 239,783, and in 1911, 246,307. It is estimated to be 247,799 at the middle of 1913. The population of the combined Urban and Rural Districts is slightly in excess of that of the Administrative County, as the Rural District of Shifnal administers a small portion of Staffordshire. In 1901 it was 240,606, and in 1911, 247,105. It is estimated to be 248,591 at the middle of 1913.

At the 1911 census the number of males in the County was 121,834, and the number of females 124,472, or an excess of females over males of 2,638, the ratio of females to males being 1,022 to 1,000. In the whole of England and Wales the ratio was considerably higher, viz., 1,068 to 1,000. It was the lowest in the mining counties and highest in the residential counties. The excess of females over males in the United Kingdom at the Census 1911 was 1,179,276. This excess is notwithstanding the larger number of males born. During the last 50 years the proportion of boys born has been 1,041 to every 1,000 girls, and during the last 20 years about 1,037 to 1,000.

The initial excess of males rapidly disappears owing to a greater infantile mortality amongst them (excess nearly 25 per cent.). It seems probable that this excess is due to the lower initial vitality of male infants.

TABLE I.

DISTRICTS.	FAMILIES OR Separate Occupiers. 1911	POPULATION.		Increase or decrease of population in Intercensal Period.		Percentage increase or decrease.
		1901	1911	Increase.	Decrease.	
<i>Urban.</i>						
Bishop's Castle ..	360	1378	1409	31	—	+ 2.2
Bridgnorth	1346	6052	5768	—	284	— 4.7
Church Stretton ..	288	816	1455	639	—	+ 78.3
Dawley	1678	7522	7701	179	—	+ 2.4
Ellesmere	454	1945	1946	1	—	+ 0.05
Ludlow	1372	6373	5926	—	447	— 7.0
Newport	738	3241	3250	9	—	+ 0.3
Oakengates	2466	10906	11744	838	—	+ 7.7
Oswestry	2320	9579	9991	412	—	+ 4.3
Shrewsbury	6612	28395	29389	994	—	+ 3.5
Wellington	1721	7115	7820	705	—	+ 9.9
Wem	509	2149	2273	124	—	+ 5.8
Wenlock	3548	15866	15244	—	622	— 3.9
Whitchurch	1314	5221	5757	536	—	+ 10.3
Total Urban ..	24726	106558	109673	3115	—	+ 2.92

I. STATISTICS FOR 1913.

URBAN DISTRICTS.	Estimated population in 1913 upon which the rates are calculated.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.				DEATH-RATES FROM VARIOUS CAUSES.							
		Un-corrected Number	Nett.		Number	Rate.	of Non-residents registered in the District.	of Residents registered in the District.	Under 1 year of Age.		At all Ages.		Phthisis.	Other Tuberculous Diseases	Cancer.	Organic Heart Disease.	Bronchitis.	Pneumonia. (all forms).	Diarrhoea and Enteritis.	Nephritis and Bright's Disease.
			Number	Rate.					Number	Rate per 1000 Nett Births.	Number	Rate.								
Bishop's Castle	1410	23	21	14.9	27	19.1	2	3	1	48	28	19.8	1.42	.70	.70	4.25	.70	2.13	.0	.0
Bridgnorth	5768	116	115	19.9	71	12.3	7	6	12	104	70	12.1	1.04	.17	.86	.52	1.04	1.38	.34	.34
Church Stretton	1530	24	24	15.7	18	11.8	6	2	1	42	14	9.1	.65	.65	.0	.65	.0	1.30	.0	.0
Dawley	7740	234	237	30.6	75	9.7	..	8	17	72	83	10.7	.77	.13	1.03	1.03	.64	1.16	.13	.51
Ellesmere	1960	44	43	21.9	38	19.3	20	3	0	0	21	10.7	.0	.0	1.02	2.55	.51	1.53	.0	1.02
Ludlow	5850	105	105	17.9	85	14.5	10	9	4	38	84	14.3	1.19	.51	1.02	1.53	.85	.68	.0	.85
Newport	3250	59	57	17.5	39	12.0	8	4	2	35	35	10.8	1.53	.0	1.23	1.53	1.23	.30	.0	.0
Oakengates	11904	284	285	23.9	124	10.4	..	11	27	94	135	11.3	.42	.25	1.34	1.34	1.51	.67	.75	.17
Oswestry	10000	212	214	21.4	128	12.8	3	27	19	88	152	15.2	.70	.50	1.90	2.20	.50	1.70	.0	1.60
Shrewsbury	29627	607	615	20.7	410	13.8	72	53	46	74	391	13.1	.77	.17	1.55	1.14	1.38	.87	.40	.40
Wellington	7990	184	178	22.2	106	13.3	17	16	14	78	105	13.1	.37	.12	.62	1.00	1.25	.75	.50	.87
Wem	2306	58	58	25.1	27	11.7	3	1	4	68	25	10.8	.0	.0	.86	.0	.86	1.73	.0	.0
Wenlock	15160	306	304	20.0	191	12.6	13	7	23	76	185	12.2	.79	.13	.92	1.91	.92	.92	.13	.46
Whitchurch	5850	111	111	19.0	81	13.8	11	1	15	135	71	12.1	.51	.17	.85	1.88	.17	.85	.34	.68
Whole of Urban Districts ..	110386		2367	21.4	1420	12.8	172	151	185	78	1399	12.7	.72	.22	1.20	1.42	1.02	.99	.29	.55
Whole of Urban and Rural Districts	248591		5245	21.1	2996	12.0	287	303	390	74	3012	12.1	.58	.21	1.18	1.55	.89	.78	.26	.45
RURAL DISTRICTS.																				
Atcham	21000	452	445	21.2	305	14.5	86	17	31	69	236	11.2	.80	.0	1.46	1.71	.71	.57	.28	.23
Bridgnorth	9140	..	212	23.1	95	10.3	..	7	13	61	102	11.1	.10	.43	1.20	1.53	.43	.43	.32	.21
Burford	1323	26	27	20.4	14	10.6	3	2	1	37	13	9.8	1.51	1.51	2.26	1.51	.0	.75	.0	.0
Chirbury	3304	50	50	15.1	42	12.7	..	1	3	60	43	13.0	1.21	.30	1.21	1.51	1.21	.60	.0	.60
Church Stretton	4840	83	84	17.4	45	9.3	..	5	7	83	50	10.3	.20	.0	.82	1.44	1.44	.41	.0	.0
Cleobury Mortimer	7150	171	171	23.9	71	9.9	1	8	11	64	78	10.9	.13	.41	.97	1.67	1.25	.55	.27	.41
Clun	6520	138	139	21.2	56	8.6	..	6	8	57	62	9.5	.92	.30	1.07	1.22	.92	.61	.0	.46
Drayton	12480	242	241	19.3	158	12.6	1	4	18	75	161	12.9	.40	.16	1.76	2.08	.80	.32	.24	.32
Ellesmere	8488	165	165	19.4	88	10.3	..	18	12	72	106	12.4	.0	.35	1.41	2.12	.70	.47	.11	.35
Ludlow	9409	214	218	23.1	91	9.7	1	15	13	59	105	11.1	.21	.21	.63	1.48	.42	.63	.10	.63
Newport	5990	125	125	20.8	65	10.8	1	14	17	136	78	13.0	.33	.16	.50	1.66	1.33	.33	.83	.50
Oswestry	15500	367	364	23.4	204	13.1	19	10	25	68	195	12.5	.45	.19	.90	1.67	.71	.96	.25	.51
Shifnal	8976	164	163	18.1	99	11.0	3	7	11	67	103	11.4	.66	.22	1.00	1.33	.77	.66	.11	.44
Teme	1644	31	32	19.4	22	13.3	..	2	3	93	24	14.5	.60	1.21	.60	.60	1.82	.0	.0	.0
Wellington	11091	..	223	20.1	107	9.6	..	19	18	80	126	11.4	.63	.0	1.35	1.98	.81	1.26	.36	.36
Wem	8373	180	180	21.5	96	11.4	..	14	13	72	110	13.1	.47	.23	1.43	1.55	.47	.35	.47	.23
Whitchurch	1945	39	39	20.0	18	9.3	..	3	1	26	21	10.8	.0	.0	.51	1.02	1.54	.51	.0	1.02
Whole of Rural Districts ..	138205		2878	20.8	1576	11.4	115	152	205	71	1613	11.6	.47	.21	1.17	1.65	.79	.60	.24	.37
Whole of Urban and Rural Districts	248591		5245	21.1	2996	12.0	287	303	390	74	3012	12.1	.58	.21	1.18	1.55	.89	.78	.26	.45

DISTRICTS.	FAMILIES OR Separate Occupiers. 1911	POPULATION.		Increase or decrease of population in Intercensal Period.		Percentage increase or decrease.
		1901	1911	Increase.	Decrease.	
<i>Rural.</i>						.
Atcham	4591	20895	21770	875	—	+ 4.2
Bridgnorth	2061	8573	9125	552	—	+ 6.4
Burford	286	1233	1308	75	—	+ 6.1
Chirbury	811	3539	3304	—	235	— 6.6
Church Stretton	1069	4479	4797	318	—	+ 7.1
Cleobury Mortimer	1419	6720	6976	256	—	+ 3.8
Clun	1517	6824	6565	—	259	— 3.8
Drayton	2846	11708	12340	632	—	+ 5.4
Ellesmere	1752	7911	8365	454	—	+ 5.7
Ludlow	2059	9585	9438	—	147	— 1.5
Newport	1306	6033	6005	—	28	— 0.5
Oswestry	3450	14727	15443	716	—	+ 4.9
Shifnal (without Weston & Blymhill)	1859	8021	8155	134	—	+ 1.7
Teme	382	1846	1644	—	202	— 10.9
Wellington	2433	10941	11091	150	—	+ 1.4
Wem	1940	8266	8373	107	—	+ 1.3
Whitchurch	439	1924	1935	11	—	+ 0.6
Total Rural ..	30220	133225	136634	3409	—	+ 2.56
Total of Urban and Rural Districts ..	54946	239783	246307	6524	—	+ 2.72

TABLE 2.
POPULATION IN AGE PERIODS AT 1911 CENSUS.

Age Period.	URBAN DISTRICTS.				RURAL DISTRICTS.			
	Males.	Females	Total.	Percentage at each age Period.	Males.	Females	Total.	Percentage at each age Period.
Under 1	1117	1105	2222	2.03	1388	1375	2763	2.0
1—5	4494	4486	8980	8.2	5768	5620	11388	8.3
5—10	5682	5758	11440	10.4	7130	7296	14426	10.6
10—15	5579	5552	11131	10.1	7013	6955	13968	10.2
15—20	5124	5056	10180	9.3	6648	5856	12504	9.2
20—25	4293	4445	8738	8.0	5284	5097	10381	7.6
25—35	7960	8372	16332	14.9	9468	9444	18912	13.8
35—45	6966	7388	14354	13.1	8564	8730	17294	12.7
45—55	5253	5800	11053	10.1	7085	6936	14021	10.3
55—65	3656	4048	7704	7.0	5009	5060	10069	7.4
65—75	2338	2973	5311	4.8	3589	3910	7499	5.5
75—85	810	1154	1964	1.8	1355	1592	2947	2.2
85—95	91	170	261	.2	166	282	448	.3
95 and upwards	1	2	3	.003	4	10	14	.01
	53364	56309	109673		68471	68163	136634	

The above table is of very considerable interest and importance, particularly when it is compared with the figures of the previous census (see Annual Report for 1909). Such a comparison shows that the age distribution of the population has altered considerably during the 10 years.

In my report for 1912 I said :—" The percentage at each age period up to 25 has decreased, and with one exception (55—65) the percentage at each age period over 25 has increased. The economic effect of this altered age distribution has probably not yet been felt, as the reduction of the population has been principally of children below the working age. During the next ten years the important age period of 15—35 will be more materially affected, and there will be a further increase of percentage of persons at the higher age periods."

The following are extracts from the 1911 census returns published in 1913 :—" It may be pointed out that though the effect of the fall in the birth-rate has hitherto been in a sense temporarily advantageous in that it has increased the proportions living at the working ages, a tendency to the reversal of this effect has already set in and may be expected to develop as time goes on." " These fluctuations are not without importance in their bearing upon the probable future proportion in our population of workers at the most economically efficient ages and especially upon the supply of recruits to the military services in future years."

A comparison of the distribution of the population in urban and rural districts is very instructive. The slightly larger percentage under one year in the urban districts indicates a higher birth-rate. In the periods 1—5, 5—10, and 10—15 years, this is more than equalised by the lower death-rate of the rural districts. At 15 the migration from the country to the towns begins, and from that age until 45, the percentage is considerably higher in the urban districts, but above 45 years, *i.e.*, at the periods of high mortality rates, the percentage is distinctly higher in the rural districts.

A comparison of the 1911 with the 1901 census figures shows that the migration of young persons between 15—35 from the country to the towns has greatly decreased during the last ten years.

This difference in the distribution of the population necessarily influences the death-rates apart from any consideration of health conditions. In order to compare one district with another or one district with the whole country, it is necessary to prepare factors of correction which remove the disturbing influence due to unequal distribution of age and sex. The following factors for correcting the death-rates have been supplied by the Registrar-General.

Whole County .8660.

Aggregate of Urban Districts ..	.8988	Aggregate of Rural Districts ..	.8410
Bishop's Castle	.7432	Atcham	.8224
Bridgnorth	.8913	Bridgnorth	.8599
Church Stretton	.9365	Burford	.8110
Dawley	.8998	Chirbury	.8004
Ellesmere	.8303	Church Stretton	.7920
Ludlow	.8389	Cleobury Mortimer	.8615
Newport	.8526	Clun.. ..	.7933
Oakengates	.9330	Drayton	.8512
Oswestry	.9231	Ellesmere	.8973
Shrewsbury	.9381	Ludlow	.8938
Wellington	.8985	Newport	.8622
Wem	.8719	Oswestry	.8502
Wenlock	.8420	Shifnal	.8253
Whitchurch	.8851	Teme	.7828
		Wellington	.8578
		Wem	.8335
		Whitchurch	.8696

MARRIAGES.

The number of marriages in the Registration County for 1913 was 1,755, compared with 1,781 for 1912. The marriage rates were 13.1 in 1913, 13.3 in 1912, 12.8 in 1911, 12.8 in 1910.

BIRTHS.

The total number of births in the Administrative County was 5,245, giving a birth-rate of 21.1, compared with 21.8 in 1912, and 22.6 in 1911. The birth-rate for the year was again the lowest on record.

The urban rate was 21.4 and the rural rate 20.8.

The birth-rate for the various sanitary districts are given in Table 1 Urban and Rural.

As in previous years the highest birth-rates were in Dawley (30.6), Oakengates (23.9), and Cleobury Mortimer (23.9). The birth-rate in the Urban District of Wem was 25.1, but the population is very small for annual statistics.

As previously explained, these crude rates are very misleading on account of differences of age and sex distribution, and in order to obtain more accurate estimates, the rates have been calculated on the basis of (1) total females between 15 and 45 years of age, (2) total married females between 15 and 45 years of age.

TABLE 3.
BIRTH-RATES IN SANITARY DISTRICTS FOR 1913.

Urban Districts.	Per 1000 females between the ages of 15 and 45.	Per 1000 <i>married</i> females between the ages of 15 and 45.	Rural Districts.	Per 1000 females between the ages of 15 and 45.	Per 1000 <i>married</i> females between the ages of 15 and 45.
Bishop's Castle ..	68	160	Atcham	94	228
Bridgnorth	81	210	Bridgnorth	109	238
Church Stretton ..	54	179	Burford	92	212
Dawley	172	300	Chirbury	76	161
Ellesmere	88	216	Church Stretton ..	83	197
Ludlow	72	183	Cleobury Mortimer ..	132	245
Newport	73	190	Clun	102	242
Oakengates	128	221	Drayton	84	195
Oswestry	90	215	Ellesmere	90	225
Shrewsbury	82	192	Ludlow	108	233
Wellington	98	214	Newport	103	233
Wem	106	236	Oswestry	113	245
Wenlock	97	196	Shifnal	87	204
Whitchurch	79	180	Teme	93	213
			Wellington	99	203
			Wem	97	214
			Whitchurch	86	219
	93	217		98	237

TABLE 4.

BIRTH-RATES IN ENGLAND AND WALES AND THE COUNTY OF SALOP FOR 1912, CALCULATED (1) ON WHOLE POPULATION, (2) ON FEMALES BETWEEN 15 AND 45, AND (3) ON MARRIED FEMALES BETWEEN 15 AND 45.

	Birth-rates calculated on the whole population.	Birth-rates calculated on the number of females between 15 and 45 years of age.	Birth-rates calculated on the number of <i>married</i> females between 15 and 45 years. of age.
England and Wales	23.9	95.8	200.1
Shropshire (Urban and Rural Districts) ..	21.1	95.7	227.7
Shropshire—Urban Districts	21.4	92.8	217.3
Shropshire—Rural Districts	20.8	98.2	237.0

This table shows that the true birth-rate of Shropshire approximates closely to that of England and Wales. It shows also that the birth-rate is higher in the rural districts of Shropshire than in the urban districts.

DEATHS.

The number of deaths registered in the County was 2,996. The number of deaths after making corrections for non-residents dying in the County and persons belonging to the County dying outside, was 3,012. This is the number employed in the calculation of the death-rates.

The death-rate, which was the lowest on record, was 12.1 compared with 13.1 in 1912, and 13.8 in 1911.

For the third year the deaths of persons in public institutions and of other persons who have died away from home have been distributed by the Registrar-General to the various districts to which they belong. The total number of deaths deducted from the districts was 287, and the total number added was 303. This is no doubt a much more correct distribution than was previously obtained, and it should render statistics more reliable.

The highest rates amongst the Urban Districts were Bishop's Castle 19.1, Oswestry 15.2, and Ludlow 14.3; and amongst the Rural Districts, Teme 14.5, Weir 13.1, Chirbury 13.0, and Newport 13.0.

In Table 5 a comparison is made of the rates, both crude and corrected, for age and sex of Shropshire Urban and Rural Districts with England and Wales Urban and Rural Districts.

The crude rate for Shropshire was slightly less than the rate for England and Wales, and when corrected the difference was much more marked.

TABLE 5.
CRUDE AND CORRECTED DEATH-RATES IN THE
URBAN AND RURAL DISTRICTS OF SHROPSHIRE AND ENGLAND AND WALES,
FOR THE LAST 3 YEARS.

Period.	Shropshire.		England and Wales. Rates.	Urban Districts. of Shropshire.		Urban Counties of England and Wales. † Corrected Rates.	Rural Districts of Shropshire.		Rural Counties of England and Wales. † Corrected Rates.
	Crude † Rates.	Corrected Rates.		Crude † Rates.	Corrected Rates.		Crude † Rates.	Corrected Rates.	
1913	12.1	10.4	13.4	12.7	11.4	*	11.6	9.7	*
1912	13.1	11.3	13.3	13.8	12.4	14.7	12.5	11.2	10.8
1911	13.8	11.9	14.6	14.3	12.8	15.2	13.4	11.2	11.4

* These figures are not yet available.

† These are the rates of mortality that would result if the age and sex constitution of the population of the Districts were identical with those of the population of England and Wales at the Census.

INFANTILE MORTALITY.

There were 390 deaths of infants under one year of age, equal to a mortality of 74 for every 1000 births, compared with a rate of 72 in 1912, 91 in 1911, 82 in 1910, 91 in 1909, 100 in 1908, 91 in 1907, 97 in 1906, 93 in 1905, and an average of 106 for the previous five years.

The rate for England and Wales was 109, and excluding 241 towns, 96.

In Table I. Urban and Rural are given the infantile rates for each sanitary district, and in Table IV. a detailed analysis is given with regard to causation of death and age at death.

The rate for the combined urban districts was 78, and that of the rural districts 71.

The highest infantile rates in the Urban Districts were :—Whitchurch (135), Bridgnorth (104), and Oakengates (94).

The infantile rate of Shrewsbury shows a small increase on the very low rate of 1912.

The infantile rates for this town for the last 12 years were :—

1902	..	142	1906	..	113	1910	..	88
1903	..	116	1907	..	136	1911	..	101
1904	..	164	1908	..	123	1912	..	72
1905	..	108	1909	..	118	1913	..	74

The diminution appears to show what can be done by energetic action directed intelligently to improving the conditions of infantile life.

The Rural Districts with the highest rates were :—Newport (136), Teme (93), and Church Stretton (83).

TABLE IV. (URBAN).
 INFANTILE MORTALITY DURING THE YEAR 1913.
 DEATHS FROM STATED CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

CAUSE OF DEATH.	WEEKS.				TOTAL under 4 weeks.	MONTHS.				Total Deaths under 1 year.
	Under 1	1—2	2—3	3—4		1—3	3—6	6—9	9—12	
Small-pox	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	2	2
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	1	1	..	1	2	2	6
Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..
Erysipelas	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis	..	..	..	..	..	1	..	..	..	1
Abdominal Tuberculosis	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases	..	..	..	..	..	..	..	..	4	4
Meningitis (not tuberculous)	..	..	..	..	..	..	..	..	..	..
Convulsions	6	4	1	..	11	6	3	1	4	25
Laryngitis	..	..	..	..	..	..	1	1	..	2
Bronchitis	..	1	..	..	1	3	2	4	2	12
Pneumonia (all forms)	..	..	..	1	1	2	7	5	3	18
Diarrhoea	..	1	..	..	1	1	2	..	..	4
Enteritis	..	1	1	2	4	2	4	7	1	18
Gastritis	..	1	..	..	1	2	..	..	..	3
Syphilis	..	..	..	..	..	..	..	..	..	..
Rickets	..	..	..	..	..	..	..	..	..	..
Suffocation, over-lying	..	..	..	..	..	..	..	..	..	..
Injury at Birth	1	..	..	..	1	..	..	..	..	1
Atelectasis	1	..	..	..	1	..	..	..	..	1
Congenital Malformations	3	..	1	..	4	..	1	..	..	5
Premature Birth	27	5	2	..	34	4	..	..	..	38
Atrophy, Debility and Marasmus	10	2	4	3	19	3	5	3	3	33
Other Causes	3	1	..	1	5	2	1	3	1	12
TOTALS	51	16	9	8	84	26	27	26	22	185

TABLE IV. (RURAL).

INFANTILE MORTALITY DURING THE YEAR 1913.

DEATHS FROM STATED CAUSES IN WEEKS AND MONTHS UNDER ONE YEAR OF AGE.

CAUSE OF DEATH.	WEEKS.				TOTAL under 4 weeks.	MONTHS.				Total Deaths under 1 year.
	Under 1	1—2	2—3	3—4		1—3	3—6	6—9	9—12	
Small-pox	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	1	1	2
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	1	1	3	1	3	2	10
Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..
Erysipelas	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis	..	..	..	..	..	..	..	2	1	3
Abdominal Tuberculosis	..	..	..	..	..	..	..	2	..	2
Other Tuberculous Diseases	..	..	..	..	..	1	..	..	..	1
Meningitis (not tuberculous)	..	..	..	1	1	..	..	..	1	2
Convulsions	2	1	..	..	3	1	4	1	3	12
Laryngitis	..	..	..	..	..	1	..	..	1	2
Bronchitis	1	..	..	..	1	3	1	7	2	14
Pneumonia (all forms)	..	..	..	2	2	3	8	4	5	22
Diarrhoea	..	..	..	..	..	1	1	2	4	8
Enteritis	..	..	..	1	1	3	3	3	2	12
Gastritis	..	..	..	..	..	..	1	..	..	1
Syphilis	..	..	..	..	..	..	..	..	..	..
Rickets	..	..	..	..	..	..	..	..	..	..
Suffocation, over-lying	..	..	..	..	..	2	1	..	..	3
Injury at Birth	2	..	..	..	2	..	..	..	..	2
Atelectasis	2	1	..	..	3	..	..	..	..	3
Congenital Malformations	4	1	..	..	5	3	1	..	..	9
Premature Birth	29	4	3	2	38	3	1	..	..	42
Atrophy, Debility and Marasmus	11	9	5	4	29	7	5	..	..	41
Other Causes	6	1	..	1	8	1	3	..	2	14
TOTALS	57	17	8	12	94	32	30	25	24	205

The annual figures, for small districts especially, vary greatly. As a more reliable guide the following table has been got out stating the infant mortality in each district for the two periods 1901—1906 and 1907—1912, and for the year 1913 :—

TABLE 6.

AVERAGE OF THE ANNUAL INFANTILE MORTALITY FOR THE SIX-YEAR PERIODS 1901—1906 and 1907—1912, and for the year 1913.

URBAN DISTRICTS.	1901—1906	1907—1912	Percentage increase or decrease in second period.	1907—1912 Percentage above or below the average for Urban Districts.	Rates of 1913.	RURAL DISTRICTS.	1901—1906	1907—1912	Percentage increase or decrease in second period.	1907—1912 Percentage above or below the average for Rural Districts.	Rates of 1913.
Abingdon ..	86	88	+ 2.3	— 9.3	48	Atcham ..	84	81	— 3.6	— 0.0	69
Barnack ..	106	120	+ 13.2	+ 23.7	104	Bridgnorth ..	87	66	— 24.1	— 18.5	61
Chesham ..	96	90	— 6.3	— 7.2	42	Burford ..	59	74	+ 25.4	— 8.6	37
Chesham ..	112	99	— 11.6	+ 2.1	72	Chirbury ..	77	61	— 20.8	— 24.7	60
Chesham ..	103	78	— 24.3	— 19.6	0	Church Stretton	97	79	— 18.6	— 2.5	83
Chesham ..	113	91	— 19.5	— 6.2	38	Cleobury					
Chesham ..	117	77	— 34.2	— 20.6	35	Mortimer ..	92	77	— 16.3	— 4.9	64
Chesham ..	138	101	— 26.8	+ 4.1	94	Clun ..	100	72	— 28.0	— 11.1	57
Chesham ..	102	97	— 4.9	— 0.0	88	Drayton ..	115	88	— 23.5	+ 8.6	75
Chesham ..	126	106	— 15.9	+ 9.3	74	Ellesmere ..	92	91	— 1.1	+ 12.3	72
Chesham ..	114	77	— 32.5	— 20.6	78	Ludlow ..	91	75	— 17.6	— 7.4	59
Chesham ..	93	94	+ 1.1	— 3.1	68	Newport ..	106	93	— 12.3	+ 14.8	136
Chesham ..	102	86	— 15.7	— 11.3	76	Oswestry ..	96	96	— 0.0	+ 18.5	68
Chesham ..	103	98	— 4.9	+ 1.0	135	Shifnal ..	94	74	— 21.3	— 8.6	67
						Teme ..	127	94	— 26.0	+ 16.0	93
						Wellington ..	102	84	— 17.6	+ 3.7	80
						Wem ..	69	68	— 1.4	— 16.0	72
						Whitchurch ..	61	64	+ 4.9	— 21.0	26
All Districts ..	112	97	— 13.4		78	All Districts ..	93	81	— 12.9		71

Comparing the two five-year periods it will be observed that the decrease has been slightly greater in the urban than in the rural districts. Apart from the small district of Burford, Bridgnorth Borough was the only district in which the infantile mortality showed a considerable increase in the second period over the first period. The most important decreases were in Newport Urban, 34.2 per cent., Wellington Urban 32.5, Clun 28.0, and Oakengates 26.8. The urban districts showing a considerable excess in the second period over the rate for combined urban districts were Bridgnorth 23.7 per cent., excess, and Shrewsbury 9.3 per cent. excess; similarly of the rural districts, Oswestry 18.5 per cent., Teme 16.0 per cent., Newport 14.8 per cent., Ellesmere 12.3 per cent. excess.

Dealing with the County as a whole it will be seen by reference to Table IV. (urban and rural) that many of the deaths were from causes of a preventable nature. In order to form a clear conception of the number of deaths from preventable causes, these have been extracted and classified according to their probable causation. It is not suggested that even with the greatest care the whole of these deaths might have been prevented, but there can be no doubt that with reasonable care and knowledge they would have been lessened by a very large percentage.

(1) Infantile deaths, of which a considerable proportion were no doubt due to errors of feeding :—

	URBAN DISTRICTS.	RURAL DISTRICTS.	WHOLE COUNTY.
Diarrhoea	4	8	12
Enteritis (not tuberculous)	18	12	30
Gastritis	3	1	4
Atrophy, Debility, Marasmus	33	41	74
Convulsions	25	12	37
Total	83	74	157

(2) Infantile deaths, a considerable proportion of which were due to improper clothing, exposure to cold, exposure to infection, and general want of attention to the laws of health :—

	URBAN DISTRICTS.	RURAL DISTRICTS.	WHOLE COUNTY.
Infectious Disease.. .. .	8	12	20
Bronchitis	2	14	16
Pneumonia (all forms)	12	22	34
Total	38	48	86

(3) Infantile deaths due to a great extent to a want of care on the part of the mother for her own health :—

	URBAN DISTRICTS.	RURAL DISTRICTS.	WHOLE COUNTY.
Premature Births	38	42	80

(4) Infantile deaths due to tuberculous infection :—

URBAN DISTRICTS.	RURAL DISTRICTS.	WHOLE COUNTY.
5	6	11

The deaths from these causes, which in a large measure may be considered as preventable, numbered 85.6 per cent. of the whole. It is evident, therefore, that there is much scope for the reduction of infantile mortality.

In previous years there was a higher percentage of deaths during the first week of life in rural than in urban districts. In 1913 the percentages were approximately equal.

The figures are :—

	Urban.	Rural.
1913 ..	27.5 per cent.	28 per cent.
1912 ..	31 per cent.	38 per cent.
1911 ..	23 per cent.	34 per cent.
1910 ..	22 per cent.	28 per cent.

The reduction of the infantile mortality depends to a great extent in instruction of mothers in matters of personal hygiene. This can only be properly carried out by the adoption of the Notification of Births Act, the formation of Schools for mothers, and by the employment of Health Visitors (see page 30).

III. (URBAN).

DEATHS IN AGE PERIODS DURING YEAR 1913, IN THE URBAN DISTRICTS OF SHROPSHIRE.																								
CAUSES OF DEATH.	TOTAL DEATHS IN URBAN DISTRICTS IN AGE PERIODS.									CAUSES OF DEATHS IN THE DIFFERENT URBAN DISTRICTS.														
	All Ages.	Under 1	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	Bishop's Castle.	Bridg-north.	Church Stretton	Dawley	Elles-mere.	Ludlow.	Newport	Oaken-gates.	Oswestry	Shrews-bury.	Wellington.	Wem.	Wenlock	Whit-church.	
Enteric Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles	4	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Scarlet Fever.. .. .	2	..	..	1	1	..	..	..	..	1	..	..	1	..	..	..	..	..	2	..	..	2	..	
Whooping Cough	9	6	3	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Diphtheria and Croup	20	..	..	8	11	1	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..	2	3	
Influenza	19	..	..	..	..	3	1	5	10	..	..	..	3	..	..	..	1	..	16	2	..	..	1	
Erysipelas	1	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	6	1	5	1	..	2	..	
Phthisis (Pulmonary Tuberculosis)	80	..	..	..	1	15	33	25	6	2	6	1	6	..	7	5	5	7	23	3	..	12	3	
Tuberculous Meningitis	5	1	..	1	..	..	3	..	..	..	..	..	..	..	..	..	1	1	2	1	..	..	..	
Other Tuberculous Diseases	19	4	1	..	5	1	3	4	1	1	1	..	1	..	..	..	1	1	2	1	..	..	..	
Cancer, malignant disease	133	..	..	..	..	1	12	67	53	1	5	1	1	..	3	..	2	4	3	..	..	2	1	
Rheumatic Fever	3	..	..	..	1	..	1	..	1	..	..	..	8	2	6	4	16	19	46	5	2	14	5	
Meningitis	6	..	1	2	1	1	..	1	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	
Organic Heart Disease	157	..	..	..	4	7	9	45	92	6	3	1	8	5	9	5	16	22	34	8	..	29	11	
Bronchitis	113	13	5	2	..	3	19	71	71	1	6	..	5	9	5	16	22	34	8	..	29	11		
Pneumonia (all forms)	110	18	16	9	4	2	13	19	29	3	8	2	9	1	5	4	18	5	41	10	2	14	1	
Other Diseases of Respiratory Organs	13	..	..	..	1	..	3	4	5	..	..	..	1	3	4	1	8	17	26	6	4	14	5	
Diarrhoea and Enteritis	32	25	5	1	..	..	1	..	..	..	2	..	1	..	1	..	3	..	5	2	..	..	1	
Appendicitis and Typhlitis	7	..	..	..	1	..	3	3	..	..	..	..	1	..	..	..	9	..	12	4	..	2	2	
Cirrhosis of Liver	11	..	..	..	..	..	3	7	1	..	1	..	..	..	..	..	4	2	..	1	..	..	..	
Alcoholism	4	..	..	..	..	..	1	2	1	..	..	..	1	..	..	..	2	2	3	1	..	..	1	
Nephritis and Bright's Disease	61	..	..	..	..	3	7	23	28	..	2	..	4	2	5	..	1	..	1	1	..	1	..	
Puerperal Fever	1	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	16	12	7	..	7	4	
Other Accidents and Diseases of Pregnancy and Parturition.. .. .	5	..	..	..	..	1	4	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
Congenital Debility and Malformation including Premature Birth	79	79	..	..	..	..	..	..	..	..	..	..	9	..	2	..	7	8	17	8	3	10	9	
Violent Deaths, excluding Suicide	40	2	1	4	..	5	14	6	8	..	3	..	2	..	2	2	4	7	10	4	..	6	..	
Suicides	10	..	..	..	..	..	4	5	1	..	1	..	1	..	1	..	1	..	3	2	..	1	..	
Other Defined Diseases	394	28	2	5	7	7	41	74	230	9	23	6	16	3	35	10	29	32	123	39	13	40	12	
Diseases ill-defined or unknown	61	7	1	1	..	..	1	6	45	4	2	3	5	5	2	3	2	3	..	1	..	25	10	
TOTALS	1399	185	36	35	37	47	161	316	582	28	70	14	83	21	84	35	135	152	391	105	25	185	71	

III. (RURAL).

CAUSES OF DEATH IN AGE PERIODS DURING THE YEAR 1913, IN THE RURAL DISTRICTS OF SHROPSHIRE.

CAUSES OF DEATH.	TOTAL DEATHS IN RURAL DISTRICTS IN AGE PERIODS.									CAUSES OF DEATHS IN THE DIFFERENT RURAL DISTRICTS.																
	All Ages.	Under 1	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	Atcham.	Bridg-north.	Burford.	Chirbury	Church Stretton	Cleobury Mor-timer.	Clun.	Drayton	Elles-mere.	Ludlow.	Newport	Oswestry	Shifnal.	Teme.	Welling-ton.	Wem.	Whit-church.
Enteric Fever	3	..	..	1	..	1	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..	
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Measles	12	2	1	5	4	..	..	..	..	1	1	..	..	..	..	..	..	1	2	..	5	2	..	..	..	
Scarlet Fever.. .. .	2	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	
Whooping Cough	13	10	..	2	1	..	..	..	..	1	..	..	..	..	..	..	7	2	..	2	..	..	..	1	..	
Diphtheria and Croup	7	..	2	..	5	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	2	..	2	..	..	
Influenza	23	1	..	1	..	1	..	9	11	2	2	..	..	..	..	1	2	1	2	3	4	..	2	4	..	
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Phthisis	66	1	..	..	..	18	33	12	2	17	1	2	4	1	1	6	5	..	2	2	7	6	1	7	4	
Tuberculous Meningitis	8	3	1	1	1	2	..	..	..	..	..	..	1	..	1	..	2	..	..	1	1	1	..	..	..	
Other Tuberculous Diseases	21	2	2	2	4	4	5	1	1	..	4	2	..	..	2	2	..	3	2	..	2	1	1	..	..	
Cancer, malignant disease	162	..	..	..	..	9	59	94	94	31	11	3	4	4	7	7	22	12	6	3	14	9	1	15	12	
Rheumatic Fever	4	..	..	..	1	1	..	1	1	..	..	..	..	1	..	..	1	..	..	..	1	..	..	1	..	
Meningitis	8	2	..	2	2	2	..	..	..	1	..	..	..	..	..	..	..	1	..	1	2	1	..	1	..	
Organic Heart Disease	228	1	1	..	..	4	15	60	147	36	14	2	5	7	12	8	26	18	14	10	26	12	1	22	13	
Bronchitis	110	15	3	2	..	1	19	70	70	15	4	..	4	7	9	6	10	6	4	8	11	7	3	9	4	
Pneumonia (all forms)	84	20	9	1	1	3	9	13	28	12	4	1	2	2	4	4	4	4	6	2	15	6	..	14	3	
Other Diseases of Respiratory Organs	14	1	2	1	..	2	3	5	5	5	1	1	..	..	..	1	..	..	2	..	2	2	..	..	..	
Diarrhoea and Enteritis	34	20	2	3	2	..	..	2	5	6	3	..	..	..	2	..	3	1	1	5	4	1	..	4	4	
Appendicitis and Typhlitis	4	..	..	..	..	2	2	..	..	..	..	..	..	..	1	..	..	1	1	..	..	..	1	..	..	
Cirrhosis of Liver	8	..	..	..	..	..	1	3	4	..	1	..	..	..	1	..	3	..	..	1	1	..	..	1	..	
Alcoholism	4	..	..	..	..	..	1	3	..	..	..	..	..	..	1	..	..	1	..	1	..	1	..	..	..	
Nephritis and Bright's Disease	51	1	1	..	..	3	3	17	26	5	2	..	2	..	3	3	4	3	6	3	8	4	..	4	2	
Puerperal Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Other Accidents and Diseases of Pregnancy and Parturition.. .. .	9	..	..	..	..	2	7	..	..	2	..	..	1	1	..	..	3	..	1	..	1	..	..	..	..	
Congenital Debility and Malformation including Premature Birth	98	94	4	..	..	..	..	..	..	15	6	..	3	5	5	..	7	4	6	9	14	6	2	9	5	
Violent Deaths, excluding Suicide	46	3	..	4	4	4	15	7	9	5	4	..	..	1	3	2	6	2	5	1	12	2	..	2	1	
Suicides	18	..	..	..	..	7	5	3	3	2	2	..	..	..	..	..	5	4	1	..	1	1	..	1	1	
Other Defined Diseases	431	20	3	1	4	7	33	89	274	39	15	2	15	11	25	12	33	28	38	23	59	39	13	23	51	
Diseases ill-defined or unknown	145	9	2	2	..	..	1	9	122	41	25	..	2	10	..	10	18	14	3	6	2	..	..	10	..	
TOTALS	1613	205	33	29	30	61	143	310	802	236	102	13	43	50	78	62	161	106	105	78	195	103	24	126	110	21

TABLE 7
CHIEF CAUSES OF DEATH.

	Urban Districts.		Rural Districts.		Whole County.	
	1913		1913		1913	
	Deaths.	Death-rates.	Deaths.	Death-rates.	Deaths.	Death-rates.
Phthisis	80	.72	66	.47	146	.58
Other Tuberculous Diseases	24	.22	29	.21	53	.21
Cancer	133	1.20	162	1.17	295	1.18
Organic Heart Disease	157	1.42	228	1.65	385	1.55
Bronchitis	113	1.02	110	.79	223	.89
Pneumonia (all forms)	110	.99	84	.60	194	.78
Diarrhoea and Enteritis	32	.29	34	.24	66	.26
Nephritis and Bright's Disease	61	.55	51	.37	112	.45

INFECTIOUS DISEASE.

Small-pox.—No case of small-pox was notified during the year. There has now been almost complete freedom from small-pox in the County since 1904. It must be remembered, however, that the performance of vaccination, which reached a high degree of efficiency in the years 1903 and 1904, has been falling off rapidly during the last four or five years. It is all the more necessary therefore that one should see that the other means of controlling small-pox are kept in an efficient condition.

Scarlet Fever.—The number of cases notified was 568, compared with 418 in 1912, 874 in 1911, 729 in 1910, and 1,069 in 1909. There were 4 deaths, compared with 6 in 1912, 10 in 1911, 13 in 1910, and 31 in 1909.

The case mortality has been very low during the last three years—2.9 in 1909, 1.8 in 1910, 1.1 in 1911, 1.4 in 1912, and .7 in 1913. This low mortality may be due principally to an increasing mildness of the disease or to a greater vigilance of sanitary officials, which has resulted in many mild and otherwise overlooked cases being discovered.

The districts principally affected were the urban districts of Bishop's Castle (17), Church Stretton (17), Ellesmere (19), Shrewsbury (85), Wenlock (38), and Whitchurch (29); and the rural districts of Bridgnorth (39), Church Stretton (33), Ellesmere (29), and Ludlow (42).

Cases were removed to hospital at Shrewsbury (79), Drayton (3), and Bridgnorth (3).

In Chirbury Rural District, 7 cases occurred in one family, and owing to impossibility of isolation at home were removed to Forden Small-pox Hospital.

Referring to cases in Church Stretton Rural District, Dr. Gepp says:—

"In some of the cases the possibilities of isolation and treatment at home were notably defective, and hospital isolation would have been of great benefit."

Ludlow Rural.—"The multiplication of the cases, through the want of proper isolation and efficient nursing was evident throughout the epidemic."

Measles.—There were 16 deaths from measles compared with 21 in 1912, 23 in 1911, 30 in 1910, 8 in 1909, 42 in 1908, and 57 in 1907.

In the Education County 1,075 cases were notified by the school teachers, and 31 schools were closed on the recommendation of the School Medical Officer.

In my report for 1912 I said :—“ With our present knowledge and facilities little or nothing can be done to prevent the spread of measles. Much, however, can be done and should be done to lessen the mortality from measles. The mortality is mostly due to lack of care on the part of the parents, arising from the light way in which the disease is regarded, and it is probable that a good system of health visiting would reduce the mortality by at least 50 per cent. In the meantime some good may be effected by seeing that every household where there is measles has a leaflet of instructions pointing out the dangers and how they can best be obviated.” This is now carried out so far as school children are concerned.

When the head teacher of a school learns that a child is suffering from measles, he immediately sends the following card to the home :—

Madam,—Your child has been reported to me as suffering from measles.

This disease is often fatal to young children unless they are carefully looked after, and it is always better to call in a doctor.

The child should be kept *in bed* and away from other children until all symptoms have completely disappeared, and should be kept inside the house in a well ventilated room but away from draughts for at least a week after getting up. Exposure to cold or draughts is very liable to cause bronchitis or inflammation of the lungs.

Yours sincerely,

JAMES WHEATLEY, M.D.,
School Medical Officer.

If the school is subsequently closed, he sends the following card through the children to all the households :—

Madam,

The school has been closed on account of an outbreak of measles.

It is probable that a considerable number of fresh cases of measles will occur amongst the school children during the next 12 days.

If your child should show any signs of running from the eyes or nose, it should be kept at home and away from other children until quite well.

Measles is often fatal to young children unless they are carefully looked after, and it is always better to call in a doctor.

A child suffering from measles should be kept *in bed* and away from other children until all symptoms have completely disappeared, and should be kept inside the house in a well ventilated room but away from draughts for at least a week after getting up. Exposure to cold or draughts is very liable to cause bronchitis or inflammation of the lungs.

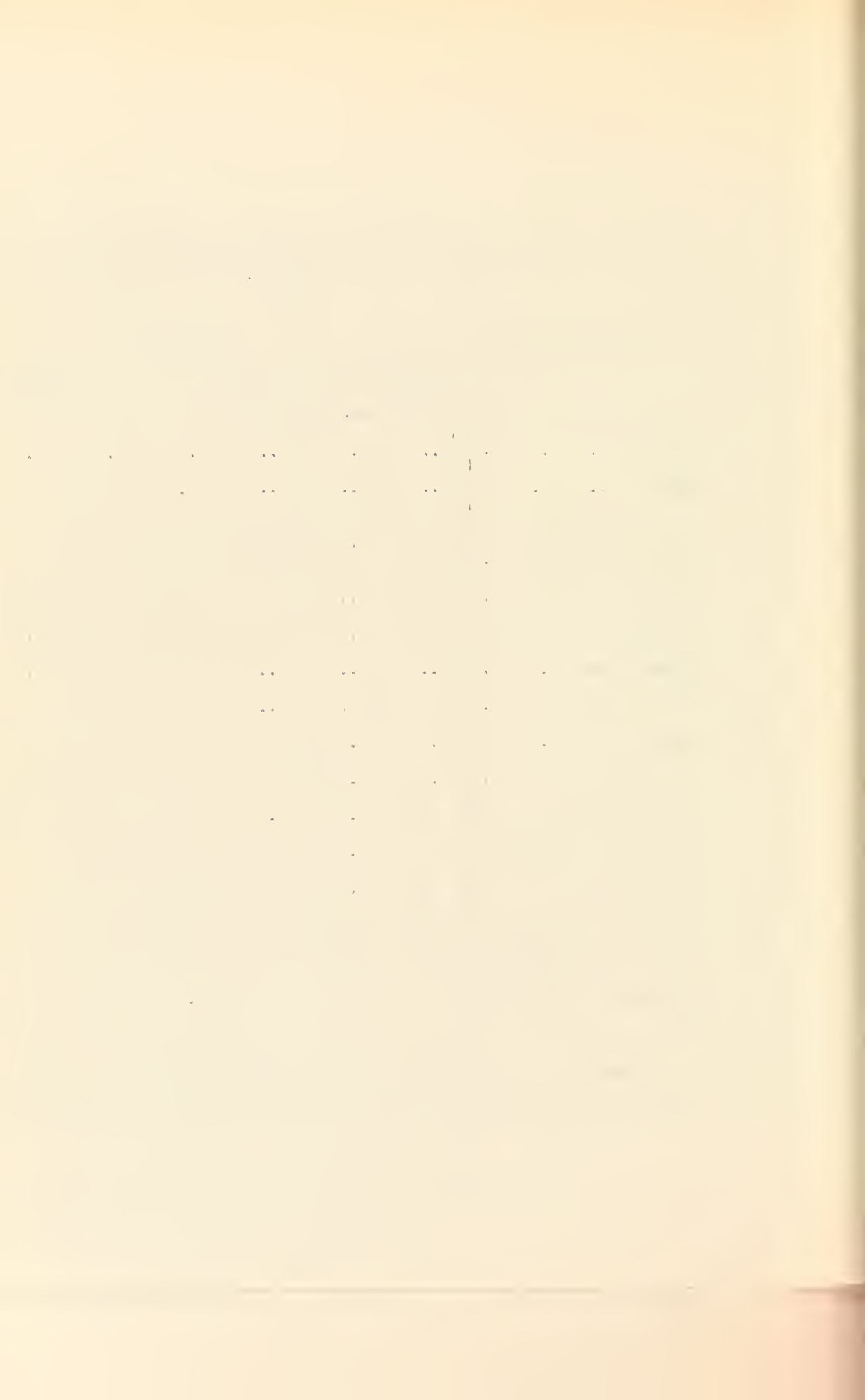
Yours sincerely,

JAMES WHEATLEY, M.D.,
School Medical Officer.

II. (URBAN).

CASES OF INFECTIOUS DISEASE NOTIFIED IN 1913 IN URBAN DISTRICTS.

NOTIFIABLE DISEASES.	CASES IN URBAN DISTRICTS IN AGE PERIODS.								TOTAL CASES NOTIFIED IN EACH DISTRICT.													
	Age Periods.								1	2	3	4	5	6	7	8	9	10	11	12	13	14
	All Ages.	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upwards	Bishop's Castle.	Bridgnorth.	Church Stretton.	Dawley.	Ellesmere.	Ludlow.	Newport.	Oakengates.	Oswestry.	Shrewsbury.	Wellington.	Wem.	Wenlock.	Whitchurch.
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria, including Membranous Croup ..	168	..	41	93	20	13	1	..	1	..	2	1	..	2	..	20	10	110	15	2	2	3
Erysipelas	37	..	..	3	2	18	13	1	..	3	..	5	2	3	1	4	4	9	1	1	3	1
Scarlet Fever	267	..	55	181	17	12	2	..	17	3	17	2	19	15	..	4	28	85	1	9	38	29
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	4	..	..	..	..	3	1	..	1	1	..	..	..	..	..	..	..	2	..	..	..	..
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	4	..	..	..	2	2	..	..	..	..	..	2	..	..	..	..	..	..	..	..	2	..
Cerebro-spinal Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Pulmonary Tuberculosis	161	2	1	18	40	72	24	4	2	9	1	17	3	7	10	5	24	35	7	..	36	5
Other forms of Tuberculosis	73	2	4	34	13	14	4	2	..	3	..	3	2	2	5	6	8	25	3	..	13	1
Ophthalmia Neonatorum	6	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..
TOTALS	721	10	101	330	94	134	45	7	21	19	20	30	26	29	16	39	74	273	27	12	94	39



II. (RURAL).
CASES OF INFECTIOUS DISEASE NOTIFIED IN 1913 IN RURAL DISTRICTS.

NOTIFIABLE DISEASES.	CASES IN RURAL DISTRICTS IN AGE PERIODS.								TOTAL CASES NOTIFIED IN EACH DISTRICT.																
	Age Periods.								1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	All Ages.	Under 1	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	Atcham.	Bridgnorth.	Burford.	Chirbury.	Church Stretton.	Cleobury Mortimer.	Clun.	Drayton.	Ellesmere.	Ludlow.	Newport.	Oswestry.	Shifnal.	Teme.	Wellington.	Wem.	Whitchurch.
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria, including Membranous Croup }	78	..	11	50	9	6	2	..	19	..	2	2	1	4	..	1	2	8	1	5	14	..	16	3	..
Erysipelas	31	1	..	1	2	9	11	7	6	..	..	1	..	3	1	5	2	5	..	3	..	..	5	..	..
Scarlet Fever	301	..	53	205	27	13	3	..	9	39	2	8	33	8	7	10	29	42	17	45	19	2	15	15	1
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	9	..	2	1	2	4	..	..	..	2	1	..	1	1	..	1	..	1	..	..	..	..	..	2	..
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	6	..	..	..	2	4	..	..	..	..	..	..	..	2	..	..	..	1	1	..	..	1	1	..	..
Cerebro-spinal Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis	3	..	..	2	..	1	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..	..	..	..	..
Pulmonary Tuberculosis	160	1	..	21	37	78	19	4	27	5	1	7	2	6	10	11	9	7	11	24	11	2	20	6	1
Other forms of Tuberculosis	57	..	4	24	10	13	4	2	7	8	2	..	2	..	5	7	6	5	3	8	1	1	1	1	..
Measles	101	..	28	56	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	101	..	..
Ophthalmia Neonatorum	3	3	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
TOTALS	749	5	98	360	106	128	39	13	70	54	8	18	39	25	23	35	48	71	33	85	46	6	159	27	2



In this way, information with regard to the disease is given to the parents as soon as possible after the onset of the illness or in many cases before onset. If this were followed up by visits by health visitors or nurses who could impress upon the parents the danger of neglect and at the same time demonstrate how the mouth and throat should be kept clean, a great reduction in mortality could undoubtedly be made.

The returns made by the parents for the medical inspection schedule appear to show that about 50 per cent. of the children suffer from measles before the age of 5, and that about 27 per cent. are attacked between the ages of 5 and 12, which includes most of school life. These figures are generally confirmed by the notifications through the schools. There is evidence to show that, although a large proportion of the children are attacked before school age, the infection in these cases is to a great extent introduced into the households through the schools.

Whooping Cough.—There were 22 deaths from whooping cough compared with 26 in 1912, 39 in 1911, 28 in 1910, 63 in 1909, and 40 in 1908. Nine of the deaths were in urban districts and 13 in rural districts.

In the Education County 515 cases were notified by the school teachers, and 14 schools were closed on the recommendation of the School Medical Officer.

The returns made by parents for the medical inspection schedule appear to show that at the age of 5 about 35 per cent. of the children have suffered from whooping cough, and that only about an additional six per cent. suffer during the period 5—12 years, which includes most of school life. Six per cent. is probably an underestimate of the percentage of children who suffer from whooping cough during school life. Notifications from the schools lead one to think that ten per cent. would be nearer the mark. Although the greater number of the cases occur before school life, the infection is probably in the majority of instances introduced from school to the households by the older children.

As regards the spread of whooping cough, preventive measures have hitherto had almost no effect, and there seems little hope of more effective control in the near future. It is undoubtedly possible to greatly diminish the mortality from this disease by the scheme for the provision of emergency nursing and inspection which has been recommended for dealing with measles.

Diphtheria.—There were 246 cases and 27 deaths, compared with 181 cases and 17 deaths in 1912, 226 cases and 19 deaths in 1911, 349 cases and 37 deaths in 1910, and 312 cases and 37 deaths in 1909. The districts principally affected were the urban districts of Shrewsbury (110), and Oakengates (20); and the rural districts of Atcham (19), Shifnal (14), and Wellington (16).

The regulation of the Local Education Authority that no children who have suffered from diphtheria shall return to school until their throats have been declared free from diphtheria bacilli has been carried out during the year.

Referring to this rule the Medical Officer of Health for the Atcham Rural District says:—“Such cases show the value of the rule, of the Local Education Authority, requiring a certificate of bacteriological freedom from diphtheria before a child notified as having diphtheria is allowed to return to school. And it is clear that a more extended system of swabbing, applied to cases other than school children, and contacts in affected families and schools, is necessary for the better control of diphtheria. Such systematic swabbing would be possible only with the general appointment of combined School Nurses and District Health Visitors in the County.”

Diphtheria was prevalent in Shrewsbury. The measures taken and the conclusions drawn are epitomed on page 112.

In Whitchurch Urban District one of the cases of diphtheria was a teacher in an elementary school. She was supposed to have had simply quinsy. A swab was taken before she returned to school. Dr. Gepp says :—" This was a case of prolonged infection, which, unrecognised, would have been a source of grave danger in school."

Enteric or Typhoid Fever.—There were 13 cases and 3 deaths compared with 11 cases and no deaths in 1912, 10 cases and no deaths in 1911, 25 cases and 10 deaths in 1910, and 45 cases and 9 deaths in 1909.

The disease is so rare in this County that each case becomes of considerable interest and is worth very careful investigation. The following remarks with regard to the cases are taken from the Annual Reports or from information obtained from the Medical Officers of Health :—

Urban Districts.

Bishop's Castle.—" An obscure case of enteric was notified in June. Two Widal tests made proved negative. There were sanitary defects connected with the premises which were remedied by the action of the Sanitary Inspector."

Bridgnorth Urban.—" One case of enteric fever has been notified in the year. This was the case of a man admitted to the Bridgnorth Infirmary, when he had contracted the disease in another District." Apparently no Widal's test was made.

Shrewsbury.—" There were two cases of enteric fever notified, one on the 23rd and the other on the 26th September. These were two ladies who within ten days of their return from a holiday on the Continent developed the disease in a typical form, so that undoubtedly the infection was obtained during their stay abroad. No further cases occurred." These cases gave positive reaction.

Rural Districts.

Bridgnorth.—" Both cases were of a serious type and proved fatal." In one of these cases the blood gave a positive reaction ; in the other a sample was not submitted. There is no information given as to the probable origin.

Burford.—One case. " The enteric fever occurred in a young child, and the water supply coming from an excellent spring was received into a tank, which was uncovered and in course of time became very polluted, and no doubt caused the condition. The tank was cleaned out and proper covering put over it." In this case no Widal's test was made.

Church Stretton.—" One obscure case was notified in All Stretton parish in April." No Widal's test was made.

Cleobury Mortimer.—" The enteric fever case was at Highley, and the probability was that it was caught outside the district." Drinking Severn water is suggested as a possible cause.

Drayton.—The patient had come eight days before the onset of his illness from the County Gaol, where he had been one month. Apparently no Widal's test was made.

Ludlow.—" The enteric fever was in a man, who came from Wales suffering from supposed influenza." The blood in this case gave Widal's reaction.

Wem.—" Two cases were notified, one of which died." The origin of these cases was obscure. One gave a positive and one a negative reaction.

Of the 13 cases, 3 are attributed to infection outside the County. In five of the cases no Widal's test was made, and in two others the test proved negative. In the remaining six a positive reaction was obtained. The origin does not appear to have been ascertained in any of the cases.

Considering the rarity of the disease it should be possible to institute very careful inquiries into every case, and the first essential should be the application of Widal's test and its re-application if necessary. Widal's test is also often of considerable use in detecting other slight cases in the family that have been overlooked.

Dr. Newsholme, in his report for 1912—13, suggests that before typhoid fever patients are discharged from hospital, their excreta should be examined for typhoid bacilli, at least in non-epidemic times. In this way no doubt many possible carriers will be discovered.

Diarrhoea and Enteritis.—There were 66 deaths from these diseases compared with 34 in 1912, 124 in 1911, 69 in 1910, and 72 in 1909.

Fifty-two out of the 66 deaths were under 2 years of age, giving a rate of .21.

These rates are now calculated by the Registrar-General per 1000 births and not per 1000 persons living. The rate per 1000 births for diarrhoea and enteritis under 2 years of age was .19. The corresponding rate for England and Wales was 28.24, and for England and Wales as 241 towns it was 16.54.

The rate for the urban districts of Shropshire was 12.6, and the rural districts 7.6.

The following table compares the deaths from diarrhoea and enteritis for the years 1909, 1910, 1911, 1912, and 1913 :—

	1909			1910			1911			1912			1913		
	Under 1 year	Over 1 year	Total	Under 1 year	Over 1 year	Total	Under 1 year	Over 1 year	Total	Under 1 year	Over 1 year	Total	Under 1 year	Over 1 year	Total
a	32	9	41	15	12	27	79	45	124	17	17	34	45	21	66
	21	10	31	27	15	42									
..	53	19	72	42	27	69	79	45	124	17	17	34	45	21	66

Puerperal Fever.—Ten cases of puerperal fever, (4 in the urban districts and 6 in the rural districts) were notified, with 6 deaths, compared with 16 cases and 6 deaths in 1912, 18 cases and 6 deaths in 1911, and 11 cases and 6 deaths in 1910. All cases where a certified midwife had been in attendance were inquired into carefully by myself or my inspector. Further details with regard to these will be found in the chapter on the Midwives Act.

The greater prevalence of puerperal fever in late years in the rural districts compared with the urban districts, is somewhat striking, especially considering the greater opportunities of infection in urban districts. The numbers since 1905 are :—

	Urban.	Rural.		Urban.	Rural.
1905	.. 9	8	1910	.. 4	7
1906	.. 4	6	1911	.. 2	16
1907	.. 4	9	1912	.. 6	10
1908	.. 6	9	1913	.. 4	6
1909	.. 9	17			

There is reason to believe that notifications of puerperal fever are becoming more complete from year to year.

TUBERCULOSIS.

TABLE 8.

	DEATH-RATES FROM PHTHISIS.											DEATH-RATES FROM OTHER FORMS OF TUBERCULOSIS.										
	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	
Urban Districts	1.18	1.4	1.0	1.20	1.15	1.09	1.04	.93	1.12	1.01	.72	.54	.41	.37	.47	.27	.45	.41	.29	.31	.25	
Rural Districts	.86	.87	.92	.91	.83	.83	.83	.77	.68	.71	.47	.32	.39	.28	.27	.31	.41	.38	.15	.37	.26	
Whole County	1.0	1.1	.96	1.04	.97	.95	.93	.85	.87	.84	.58	.41	.40	.32	.36	.29	.43	.39	.21	.34	.25	
England & Wales	1.20	1.2	1.14	1.15	1.14	1.11	1.08	1.01	1.03	1.03	*	.54	.54	.49	.49	.46	.47	.44	.41	.38	.32	

* These rates are not yet available.

Phthisis.—The death-rate from pulmonary tuberculosis for 1913 shows a very remarkable decrease on previous years. It was 31 per cent. less than 1912, and 35 per cent. less than the average for the six-year period 1907—1912. The decrease is far greater than any which has taken place in recent years, and it must be remembered that the 1912 rate with which it is compared was itself the lowest on record. One must recognise that the decrease is principally due to some factor unconnected with the administrative measures taken for its prevention, as the preventive measures except those which tend to the general betterment of the population cannot yet have taken effect. If the curative measures have had any considerable effect in prolonging life and thus lessening the number dying this year, one would expect a corresponding increase of deaths in the one or two succeeding years. This cause has probably however not operated to any considerable extent.

The notification of phthisis has been in force since the beginning of 1912. During that year 438 notifications were received. From the 1st of February, 1913, the Tuberculosis Regulations, 1912, have been in force. Under these regulations all forms of tuberculosis have to be notified. The notifications are classified as primary and secondary. The latter are the cases that have been previously notified.

TABLE V.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the period from 1st February, 1913, to the end of the week ending on the 3rd January, 1914.

Age Periods.	Number of Notifications on Form A.													Number of Notifications on Form B.				Number of Notifications on Form C.		
	Primary Notifications.												Total Notifications (<i>i.e.</i> , including cases previously notified by other doctors).	Primary Notifications.				Total Notifications (<i>i.e.</i> , including cases previously notified by other doctors).	Poor Law Institutions.	Sanatoria.
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards.	Total.		Under 5	5 to 10	10 to 15	Total.			
Pulmonary, Males	2	0	3	8	11	14	39	33	13	8	4	135	135	0	3	3	6	6	3	22
„ Females	1	1	4	11	16	20	37	22	10	5	4	131	131	0	0	2	2	2	0	12
Non-pulmonary, Males ..	1	4	14	6	7	3	10	6	2	0	0	53	53	0	3	1	4	4	2	0
„ Females ..	1	4	12	12	7	5	6	1	4	1	4	57	57	0	4	3	7	7	0	0
Totals ..	5	9	33	37	41	42	92	62	29	14	12	376	376	0	10	9	19	19	5	34

The number of primary notifications of pulmonary tuberculosis (phthisis) was 266 on Form A and 8 on Form B, or a total of 274. To complete the figures for the year one must add the number notified in the month of January, 1913, and deduct those notified on January 1st, 2nd and 3rd, 1914, making a total for the year of 285.

In my last year's report I said :—" It is evident that only a fraction of the cases were notified, and as the completeness of notification is an essential factor in the prevention of the disease, it is important to find out what this proportion was. It is important too, that one should adopt some method of estimating the completeness of notification, so that the results year by year can be compared. For this purpose it has been assumed that the average duration of cases of phthisis, in a condition that can be recognised, is 4 years. On this supposition, the number of cases at any one time would be equal to four times the annual number of deaths. The average annual number of deaths for the four years ending 1912 was 212, and the number of cases of phthisis alive on December 31st, 1912, may be consequently assumed to be 848. In order to arrive at the number of cases that should have been notified it is necessary to add to this number, the number of deaths during the year 1912 (208), and to deduct the number notified in 1911 that were alive in 1912 (approximately 35), as these cases did not require re-notification. This gives a total of 1,021. The actual number of cases notified in 1912, eliminating those notified a second time, was 426, or approximately 42 per cent. of the estimated number of cases. This must be deemed satisfactory as a first year's notification, considering the reluctance of patients to call in medical men and the difficulty of diagnosis in the early stages of the disease."

Applying this method of calculation in order to see what proportion of cases have been notified, one finds (a) that the number of deaths for the four years ending December 31st, 1913, was 776, (b) the number of deaths for the year 1913 was 146, (c) the number of cases notified in previous years that were alive on January 1st, 1913, was 309. $776 + 146 - 309$ gives approximately the number of cases that should have been notified in 1913, viz., 613. The actual number was 285, or 46 per cent.

The excess amongst females notified in 1912 was practically non-existent in 1913.

Seventy per cent. of the cases of pulmonary tuberculosis were between the ages of 15 and 45.

TABLE 9.

AVERAGE PHTHISIS DEATH-RATES FOR THE SIX-YEAR PERIODS 1901—1906 AND 1907—1912, and 1913.

URBAN DISTRICTS.	1901—1906	1907—1912	Percentage increase or decrease in second period.	1907—1912 Percentage above or below the average for Urban Districts.	Rates for 1913.	RURAL DISTRICTS.	1901—1906	1907—1912	Percentage increase or decrease in second period.	1907—1912 Percentage above or below the average for Rural Districts.	Rates for 1913.
St. Castle	1.68	1.78	+ 6.0	+ 67.9	1.42	Atcham	.98	.96	— 2.0	+ 26.3	.80
North	1.56	.98	— 37.2	— 7.5	1.04	Bridgnorth	.67	.42	— 37.3	— 44.7	.10
Stretton	.66	.36	— 45.5	— 66.0	.65	Burford	1.33	.38	— 71.4	— 50.0	1.51
..	.90	.82	— 8.9	— 22.6	.77	Chirbury	1.25	1.45	+ 16.0	+ 90.8	1.21
..	.77	.86	+ 11.7	— 18.9	.0	Church Stretton ..	.73	.87	+ 19.2	+ 14.5	.20
..	1.17	1.65	+ 41.0	+ 55.7	1.19	Cleobury Mortimer	.37	.84	+ 127.0	+ 10.5	.13
rt	1.33	.97	— 27.1	— 8.5	1.53	Clun	.84	.99	+ 17.9	+ 30.3	.92
gates	.72	.66	— 8.3	— 37.7	.42	Drayton	.67	.71	+ 6.0	— 6.6	.40
ry..	1.25	1.17	— 6.4	+ 10.4	.70	Ellesmere	1.03	.56	— 45.6	— 26.3	.0
bury	1.35	1.12	— 17.0	+ 5.7	.77	Ludlow	.49	.55	+ 12.2	— 27.6	.21
gton	.95	1.10	+ 15.8	+ 3.8	.37	Newport	.80	.78	— 2.5	+ 2.6	.33
..	.76	.44	— 42.1	— 58.5	.0	Oswestry	.85	.89	+ 4.7	+ 17.1	.45
k	1.49	1.34	— 10.1	+ 26.4	.79	Shifnal	.92	.52	— 43.5	— 31.6	.66
urch	.84	.76	— 9.5	— 28.3	.51	Teme	1.49	.70	— 53.0	— 7.9	.60
						Wellington	.97	.71	— 26.8	— 6.6	.63
						Wem	.88	.74	— 15.9	— 2.6	.47
						Whitchurch	.52	.43	— 17.3	— 43.4	.0
istricts	1.19	1.06	— 10.9		.72	All Districts ..	.83	.76	— 8.4		.47

In several reports Dr. Gepp says :—" I would repeat my recommendation that District Councils should appoint these nurse-inspectors as their officers also, so that their services may be available in assisting in the Council's duties of prevention of the disease in the homes."

Atcham.—" Towards the close of the year the Council upon my recommendation, purchased two of Boulton & Paul's shelters for outdoor treatment of non-insured patients at their homes. These are of strong construction and excellent type, costing some £14 each. One was immediately lent to a suitable case and erected by the Council."

Bishop's Castle Urban.—" For the past ten years the average annual death-rate from pulmonary tuberculosis has been 1.63, which is about 50 per cent. in excess of the average rate of the Urban Districts of Shropshire. I stated last year that there has been doubt as to what extent recent cases have really belonged to the District. In one of the two fatal cases last year the family had been only a few months resident in the town. In any case it must be accepted that a heavy phthisis mortality has affected the Borough in recent years, and every effort should be made to prevent the spread of infection in every case arising."

Chirbury Rural.—" The Council has purchased a shelter for the use of tuberculous patients."

Clun Rural.—" The speedy establishment of a Tuberculosis Dispensary for the district is very desirable in view of the prevalence of tuberculosis shown by the number of deaths and of cases notified."

Ludlow Urban.—" The majority of the cases were young, and in the incipient stage, and suitable for sanatorium treatment. A large proportion of them were living in houses, which, owing to the dampness or deficiency of ventilation and lighting, must be regarded as detrimental to their disease, and retard their recovery. It seems to me that phthisis is unduly prevalent in the Borough, and that the proportion of deaths to the cases notified is unduly large. I believe it would be advantageous if the cases receiving domiciliary treatment in shelters were treated in the ground of the Small-pox Hospital, and not in the back yards in the centre of the town, where the air is by no means free from dust and smell, and often somewhat stagnant."

Ludlow Rural.—" If it were possible to employ a district nurse for this purpose, the adequate carrying out of open air treatment might be assured, and the necessary disinfection of the room occupied by the patient provided for. Patients are apt to get lax in the precautions which should be taken to prevent the spread of infection, when the duration is so prolonged as many phthisis cases are." Of the 7 cases of phthisis, 3 were in quarrymen.

Shifnal Rural.—" This is a district where patients should do well in shelters, after a preliminary training in a sanatorium. I would suggest that the Council provide two for use in suitable cases, and that they be lent when the medical attendant applies for them."

Shrewsbury Urban.—" The health visitor provides the patients with leaflets of instructions, teaches the patients to take their temperature and generally advises them as to open-air treatment and the prevention of infection. Sputum flasks are provided for patients who cannot afford to pay for them, and during the year they were provided for 23 cases.

" The Council provides four phthisis shelters, and during the year these were taken advantage of by 7 patients. A larger number of shelters would be provided by the Council if the patients had space available for their erection, but the patients who have suitable yards or gardens for the purpose are only sufficient to keep four shelters going."

Wenlock Borough.—" Each Ward except Barrow shows a rate above that of the Shropshire Urban Districts. I have pointed out in former years that the death-rate from phthisis in the Borough showed no tendency to reduction, and I have attributed the comparatively high rate to conditions of bad housing and of poverty, assisted to some extent by certain industries associated with dust. The two last years, 1912 and 1913, have been below the average in the Borough, and if maintained this reduction will be very satisfactory.

" During the year 36 cases of pulmonary, and 13 of other forms of, tuberculosis, were notified under the Public Health (Tuberculosis) Regulations, 1912. These cases were not as a rule visited, except in fatal cases, when the Sanitary Inspector carried out or supervised disinfection and inspected the premises for defective conditions. Fifteen patients were admitted for treatment to the Shropshire Sanatorium, which is situated within the Borough."

Whitchurch Urban.—" The Council, during the year, on my recommendation, purchased two shelters of ' Taunton ' design for outdoor treatment at home. They were lent out to suitable cases, and erected in the gardens by the Surveyor."

The scheme approved generally by the County Council for the treatment and prevention of consumption in the County was described in detail in the last Annual Report.

Definite and satisfactory agreements have now been made between the County Council on the one hand and the Association for the Prevention of Consumption and the Insurance Committee on the other.

The position with regard to the scheme is that—

(1) One tuberculosis medical officer has been appointed and has been working in the County since June 9th, 1913.

(2) There are 36* sanatorium beds at the King Edward Memorial Sanatorium available for patients of the County.

(3) A central dispensary has been established in Shrewsbury.

(4) A whole time tuberculosis nurse has been appointed and another nurse has been engaged for half her time.

In addition, negotiations have been entered into for establishing dispensaries at Wellington and Oswestry.

Two joint hospital Committees have been formed for the purpose of providing isolation hospital accommodation. At these hospitals, when erected, beds for advanced cases of phthisis will be provided for most of the East and South of the County.

Many attempts have been made to find a site in the neighbourhood of Shrewsbury for a hospital for advanced and acute cases, but so far without success.

Work under the Scheme at the present time.—All cases notified are visited by the Tuberculosis Medical Officer unless there is some objection on the part of the patient or the medical attendant. In addition all cases discharged from the Sanatorium are visited at an early date, and also school children suspected of consumption. The cases previously notified are visited as opportunity offers.

The Tuberculosis Medical Officer makes a recommendation with respect to insured persons as to the kind of treatment—domiciliary, dispensary, or sanatorium.

* Increased by the opening of the extension to 55 beds.

A complete report is made on every case dealing with the surroundings and conduct of the patient and his method of life. In all cases where application is made for sanatorium benefit the Tuberculosis Medical Officer examines the patient. In other cases, he examines the patient with the permission or on the request of the medical attendant. Instructions are given in all matters concerning the prevention of infection and the health of the patient. Contacts who show any signs of illness are examined or advised to attend the dispensary, if accessible.

Cards are made out of children living in phthisis houses, and they are examined at the school at the next visit of the medical inspector.

The cases are followed up by the Tuberculosis Nurse-Inspector, who enters more into detail of household arrangements and tries to bring about a strict observance of the rules relating to the prevention of infection. The efficiency of any scheme depends to a great extent upon the frequency of these visits.

The following is the number of visits paid by the Tuberculosis Medical Officer in 1913, from June 9th :—

Visits to insured persons	..	..	..	213
Visits to non-insured persons	..	..	..	126
Visits to school children..	..	..	..	52
				391

Complete records of the initial inspections and of the examination of the patients are kept on loose sheets and filed with other papers concerning the case. Notes of subsequent inspections both of the Tuberculosis Medical Officer and the nurses are made on cards and filed in card cabinets. A copy of the first report on the history and surroundings of the patient is sent to the District Medical Officer of Health and afterwards any further facts that should be brought to his notice. For the year 1913 these reports were so incomplete that an analysis would be of little value. It is hoped next year to analyse them completely with regard to size of dwellings, amount of isolation, sources of infection, occupation and other matters.

The number of patients admitted to the Sanatorium in 1913 was 83, and consisted of :—

Insured patients—Males	..	..	36
„ „ Females	..	..	23
Non-insured patients—Males	..	..	11
„ „ Females	..	..	13

For patients who cannot go to the Sanatorium, for those leaving the sanatorium who need a continuation of open-air treatment, and for more advanced cases who are a danger to the household, a number of shelters have been provided. For the insured persons, the County Council and the Insurance Committee have provided 38 shelters. Several of the Sanitary Authorities have provided shelters—Shrewsbury 4, Atcham 2, Whitchurch 2, Drayton 2, Chirbury 1. In addition a considerable number of shelters have been provided by private persons or by the branches of the County Association. The Ludlow branch has provided four shelters.

The most valuable use for shelters will undoubtedly be found in providing living and sleeping accommodation for advanced and highly infectious cases. The removal of such a case from a crowded household into a shelter not only removes a most dangerous source of infection but also provides more room for the remainder of the occupants and thus reduces overcrowding. To what extent the use of shelters will do away with the necessity for hospital beds for advanced cases, it is at present impossible to say. There will always remain those cases that cannot be properly looked after at home, including especially those cases where the mother of the family is the person affected, and those in which the surroundings of the home do not permit of the use of a shelter.

As stated above, Dr. White has suggested that shelters should be provided at the small-pox hospital, Ludlow, instead of in the backyards of the patients' houses. There is no doubt that if the difficulties connected with this suggestion could be got over, it would result in much good. It must be remembered, however, that the provision of shelters away from the homes of the patients is to some extent the establishment of a hospital and would need similar administration. If colonies of this kind could be provided outside towns, from which people could proceed to their daily work in the towns, a great want would be met.

A Central Care Committee has been formed by the Association for the Prevention of Consumption and sub-committees covering the whole County. The object of this Committee is to supplement the work of public authorities by help and advice given to individual cases. The County Medical Officer of Health now sends reports to the Central Committee of all cases discharged from the sanatorium, and of any other cases that he thinks should come under their notice.

Although the provision of institutional treatment of tuberculosis and the supervision of domiciliary treatment are in the hands of the County Council, probably the most important work in the *prevention* of tuberculosis remains as a duty of sanitary authorities. Dr. Newsholme says in his Annual Report for 1912—13 :—"It will be observed that the Medical Officer of Health is made responsible for the action needed to trace sources of infection, to prevent the spread of infection or to remove conditions favourable to infection. This responsibility rests with him whatever may be the local system of organisation as to tuberculosis. The officers of the tuberculosis dispensary acting independently can only deal with the cases attending the dispensary, including those applying for sanatorium benefit, and cannot undertake the work of cleansing, disinfection, or other sanitary improvements that may be needed."

It is most important that there should be the closest possible association between this new work of the County Council and the work of Sanitary Authorities.

The disinfection of houses after and during the progress of cases of phthisis is a matter that requires some consideration.

I have suggested to the Medical Officers of Health of the Districts that it should be carried out on the following occasions :—

1. On notification of case.
2. During progress of the case, to be determined by the nature of the case and its surroundings. This should only be necessary in exceptional cases.
3. On removal to the sanatorium or change of address.
4. After death.
5. Disinfection of shelter when it has ceased to be used.

Great importance has always been laid, in the prevention of phthisis, on attempts to lessen indiscriminate spitting. So long ago as 1904, a bye-law was passed by the County Council to the following effect, and it was freely advertised :—

"No person shall spit on the floor, side, or wall of any public carriage, or of any public hall, public waiting room, or place of public entertainment, whether admission thereto be obtained upon payment or not."

Good work has also been done by posters in public houses, workshops and factories, and there can be no doubt, as a result of this work and of general education, that spitting is now much less common. It is probable that the public have now been sufficiently educated for a more forward policy. In the City of Birmingham a bye-law has been in force since September, 1911, prohibiting spitting on the footway of any public street. The adoption of a similar bye-law and the further advertisement of the bye-law already in force is worth consideration.

Other Tuberculous Diseases.—The death-rate (.21) for these diseases was considerably less than in 1912, and was equal to the exceptionally low rate for the year 1910.

Since February 1st, 1913, these diseases have been made notifiable. The particulars with regard to age distribution and sex are given on Table V., and the numbers in each district in Table II. Urban and Rural.

So far the County Council's scheme has not provided any treatment for these cases, but a considerable number are treated at the Baschurch Convalescent Home, the payment being covered by subscribers' letters. Several public authorities have made arrangements under the National Insurance Act, for the treatment of cases at this home.

CANCER.

Cancer caused 295 deaths during the year, compared with 268 in 1912, 265 in 1911, 298 in 1910, and 261 in 1909.

For the last three years the deaths have been carefully allocated to the districts that they really belonged to. It was anticipated that this would add materially to the number of deaths in the County, but apparently it has not had such a result.

The death-rates in the various districts will be found on Table I. Urban and Rural. The districts with the highest rates for the year were :—Oswestry Urban 1.90 and Shrewsbury 1.55, and in the Rural Districts, Burford 2.26, Drayton 1.76, and Atcham 1.46.

The rate for the combined rural districts was again higher than that of the combined urban districts.

As explained in the previous reports, cancer rates are determined very much by the age distribution of the population. Other things being equal, a district with a large proportion of old people will have a high cancer rate, and districts with a large proportion of young people will have a low cancer rate.

The following table calculated on the population over 45 years of age gives a much more reliable indication of the incidence of cancer :—

TABLE 10.

CANCER DEATH-RATES CALCULATED UPON THE POPULATION OVER 45 YEARS OF AGE.

URBAN DISTRICTS.								RURAL DISTRICTS.								
	1913	1912	1900 to 1912		1913	1912	1900 to 1912		1913	1912	1900 to 1912		1913	1912	1900 to 1912	
Bishop's Castle	2.5	5.0	3.6	Oakengates ..	6.6	2.9	4.1	Atcham ..	5.2	4.7	3.8	Ludlow ..	2.6	5.7	3.0	
Bridgnorth ..	3.3	6.0	5.1	Oswestry ..	7.8	2.1	4.1	Bridgnorth ..	4.8	3.9	4.0	Newport ..	1.9	4.6	3.0	
Church Stretton	..	7.4	3.8	Shrewsbury ..	1.2	2.6	4.4	Burford ..	8.8	0.0	3.8	Oswestry ..	3.5	5.9	4.0	
Dawley ..	4.6	6.4	4.7	Wellington ..	2.7	2.7	4.8	Chirbury ..	4.3	3.3	3.5	Shifnal ..	4.3	4.8	4.0	
Ellesmere ..	3.8	7.6	5.1	Wem ..	3.6	5.4	4.7	Church Stretton	3.0	2.3	3.6	Teme ..	2.2	2.2	4.0	
Ludlow ..	3.8	5.1	6.2	Wenlock ..	3.6	5.5	4.2	Cleobury Mor-	..	4.5	2.6	3.6	Wellington	5.5	2.6	4.0
Newport ..	4.6	6.9	5.8	Whitchurch ..	3.6	5.7	4.9	timer ..	..	3.8	5.5	4.7	Wem ..	5.5	4.1	4.0
								Clun ..	..	6.9	5.7	4.8	Whitchurch	2.0	8.1	4.0
								Drayton ..	..	5.8	4.4	3.7				
								Ellesmere ..	..							
Combined Urban Districts	..	..	..	..	4.9	4.2	4.6	Combined Rural Districts	..	..	..	..	4.6	4.5	..	..

Taking the 13-year period it will be noticed (1) that the rural districts had a lower rate than the urban districts, (2) that the highest rates were in the old towns of Ludlow, Newport, Bridgnorth and Ellesmere, (3) that there was no markedly excessive prevalence of cancer in any district.

In previous reports it has been shown that the apparent excess of cancer in this County over the rest of England and Wales was entirely due to the age distribution of the population, and that when this is allowed for, there is slightly less cancer here than in the whole country.

CEREBRO-SPINAL FEVER AND ACUTE POLIOMYELITIS.

Four cases of poliomyelitis were notified, two in the Ludlow Rural District, one in Cleobury Mortimer Rural District, and one in Shrewsbury. The cases in Ludlow and Cleobury Mortimer were in the same neighbourhood and notified about the same time.

OPHTHALMIA NEONATORUM.

From the 1st of April, 1914, this disease has been compulsorily notifiable. The Order of the Local Government Board is termed—The Public Health (Ophthalmia Neonatorum) Regulations, 1914.

The action of the various Sanitary Authorities in making this disease notifiable is now a matter of history only, and need not be detailed.

Under the regulations, a medical man attending a case of ophthalmia neonatorum, or a midwife attending such a case must notify the Medical Officer of Health of the district forthwith. The medical attendant need not notify if the midwife has already done so, and *vice versa*. A fee of half-a-crown is paid for a notification by a medical man, and one shilling for a notification by a midwife.

A special form is set out for the notification by midwives, and the district councils have to furnish copies of this form to all certified midwives practising in their area. To enable them to carry out this regulation, each council has been supplied with a list of certified midwives in the County.

The object of the Order is to bring the cases under the notice of the Sanitary Authority at the earliest possible moment in order that proper nursing treatment may be provided. Medical treatment is already available, but it is impossible for poor persons to provide the necessary nursing. Every Sanitary Authority should therefore make arrangements for supplying a nurse in these cases at once when required.

There is some obscurity as to the powers of a Sanitary Authority to provide nurses for this purpose, but the following extract from a letter from the Local Government Board shows that the Board will sanction such expenditure if proper application is made.

“ I am directed by the Local Government Board to state that the Board would be
 “ willing to entertain applications from local sanitary authorities for their sanction under
 “ Section 133 of the Public Health Act, 1875, to the provision of medical and nursing
 “ assistance for cases of ophthalmia neonatorum occurring among poor persons. The
 “ application may be made in general terms by each local authority.”

Only three cases of this disease were notified during the year.

ACCIDENTS AND DISEASES OF PARTURITION.

There were 14 deaths from accidents and diseases of parturition apart from puerperal fever, 5 in the urban districts and 9 in the rural. The numbers in previous years were 15 in 1912, 17 in 1911, 12 in 1910, 14 in 1909, 23 in 1908, 15 in 1907, 14 in 1906, and 25 in 1905.

PREVENTION OF DENTAL CARIES.

The following statement appeared in the report for 1912 :—

Of 4,207 children at the age 5—6, examined in the elementary schools of the County in 1912, **no less than 1,112 had 10 or more decayed teeth.**

Only 3 children in 200 children at the age of 12 had teeth free from decay.

The average number of decayed teeth per child at 5 years of age was nearly 7, and at 12 years of age was 5.

Amongst the candidates examined for training as nurses by the County Council, I do not remember one instance of good teeth. The following numbers represent the teeth decayed or lost in the last 19 candidates examined :—22, 28, 16, 13, 22, 15, 17, 21, 31, 24, 17, 17, 15, 32, 23, 14, 22, 13, 28. It must be remembered that these are young women in the prime of life.

Notwithstanding the large number of candidates for the army who are rejected on account of dental caries, there were close upon 3,000 soldiers invalided home during the Boer War on account of bad teeth.

There is strong proof that this appalling and disgusting condition has to a great extent arisen during the last 50 to 100 years, and *most rapidly* during the period of our greatest sanitary progress. This must make one pause to consider whether those responsible for the public health are taking a sufficiently wide view of the subject.

It is difficult to estimate the harm that arises from dental caries and other septic mouth conditions, but there can be no doubt that it is very great. The wrong methods of feeding and in particular the absence of mastication, which produce dental caries must also have a far reaching evil effect upon the economy of the body. Once an important physiological law is departed from, it is impossible to predict where the evil will end. It is more than probable that many of the diseases of the gastro-intestinal system that are extremely prevalent at the present time are primarily due to some such departure.

Without entering into detail it may be broadly stated that injury to health from dental caries and oral sepsis arises principally from inability to masticate food and from the absorption of septic matter and disease germs into the blood. It is being recognised more and more every year that a diseased and unhealthy mouth is the starting point of many grave diseases, and also that such a condition of the mouth aggravates every acute and chronic illness. This is now thoroughly understood, and one of the first steps in dealing with a case of consumption or chronic ill-health is to see that the mouth is thoroughly attended to.

Although dental caries and oral sepsis rarely figure as a cause of death, there can be little doubt that this condition shortens life in a large proportion of the population, and what is of more consequence it is probably of all preventable conditions or diseases the one that is responsible for most ill-health and inefficiency.

Regarded also from the financial side, it may be shown apart altogether from the better health and better earning capacity of the individual, but simply as a saving of expenditure on dental treatment, that a vigorous campaign for the prevention of dental caries carried out by every means in our power would be a very paying investment.

Hitherto the poorer part of the population has been without dental treatment. This cannot continue indefinitely, and it will, in the near future, be recognised that dental treatment should be within the reach of every person.

I have estimated that thorough dental treatment for the elementary school children of this County would cost about £5,000 a year. This is for 8 years of life only, and must be multiplied many times to cover the whole period of life.

From this point of view alone, is it not worth while to commence at once to reduce the amount of dental decay to a minimum?

Without stating that every problem in connection with the cause of dental caries has been thoroughly worked out, it may fairly be said that for practical purposes the cause is known and its prevention is understood. As Sir George Newman says.—“It cannot be too clearly emphasized that by far the most important factor in the production of dental caries in children is unsuitability in the character of the diet provided from infancy onwards. The immediate cause of the disease is the accumulation about the teeth, particularly in the interstices of the teeth and in the interdental spaces, of fermentable carbo-hydrate material.”

Intelligent parents with the requisite knowledge can with a fair amount of certainty bring up their children so that they will have good teeth free from decay.

It is pathetic that at the present time the children of careful parents have usually the worst teeth. The extra care given to the children results in the more rapid destruction of their teeth.

A diet which will prevent dental caries must be one that requires vigorous mastication and must leave the teeth clean after each meal. Such a diet is within the reach of the poorest, and in some respects if followed out would mean a considerable saving on present methods of feeding, e.g., the money now spent on “sweets” would in many poor households be sufficient to pay the contributions under the Insurance Act.

Short directions, quite easy to observe, putting these ideas into a simple practical shape, have been drawn out for circulation through the schools.

Without detailing the measures necessary for this work it may be stated that all mothers should be instructed in the method of feeding their children, and that the children should be kept under periodic observation at least until they go to school and come under the inspection provided by the Local Education Authority.

This work should be carried out by Sanitary Authorities, or by the County Council doing the work of Sanitary Authorities under the Notification of Births Act.

The Education Authority is doing something to forward this work in schools, but probably much more can be done.

Every effort should be made to bring this matter before the public, and as a preliminary I would suggest that it be brought prominently under the notice of every Sanitary Authority in the County.

The need for a campaign to prevent the conditions above described is most urgent. Each year of delay means another 1,200 children in the County who will have at the age of 5, ten or more decayed teeth, and about 1,800 children who will have five to ten decayed teeth. It is quite impossible by treatment afterwards to remedy this most disastrous start in life.

The Public Health Committee after carefully considering the statement of the County Medical Officer of Health came to the following conclusions:—

1. That the enormous prevalence of dental caries amongst the people is a grave danger to the public health.

2. That there is strong reason to think that this disease is due to conditions that are preventable.

3. That there is good hope that energetic measures properly directed towards removing these conditions would in time have a markedly beneficial result.

4. That the damage is done to a great extent before school life, and consequently that the preventive work must be carried out by teaching in the homes of the people. For this purpose health visitors are needed.

5. That education through schools should be made use of to as great an extent as possible.

6. That, in addition, all other possible means should be taken to spread this knowledge.

The statement of the County Medical Officer of Health together with a pamphlet containing simple rules for the prevention of dental caries was forwarded to every Sanitary Authority in the County. Although many authorities saw the importance of the matter and made useful suggestions, they did not feel themselves in a position to take any very effective steps.

A campaign for the prevention of dental caries can only be undertaken by an authority that has under its control properly qualified persons who can carry this teaching into the homes of the people. It is hoped that much in the future may be done through the whole time health visitors who are to be appointed, and through the district nurses.

NOTIFICATION OF BIRTHS ACT AND THE EMPLOYMENT OF HEALTH VISITORS.

The County Council has decided to adopt the Notification of Births Act and to provide health visitors for the County. The village nurses employed by the various Associations are to be utilised where available for school nursing and health visiting, and for the remainder of the County full time nurse inspectors are to be appointed to undertake school nursing, health visiting and tuberculosis inspection.

In previous Annual Reports I have pointed out that preventive medicine in the future is likely to be to a great extent personal. Many diseases and conditions which hitherto have been considered to be outside the scope of sanitary authorities, are now known to be preventable, many of them much more preventable than some of the so called "preventable diseases." The personal factor in the spread of infectious diseases is now recognised as the most important one, and even in such a material matter as the housing of the working classes, the conduct of the tenant is at least of equal importance to the structure of the house. We have in the atrocious condition of teeth of the present generation an instance of the havoc that can be created by the neglect of certain elementary physiological laws, under the artificial conditions of civilisation. It certainly is an imperative duty of everybody responsible for the public health, to see that the people are instructed in the elementary principles of healthy living, and that the advances made in our knowledge in this direction are not allowed to remain wasted for many years to come.

Unfortunately, under present conditions, the great body of medical practitioners, upon whom much of this work should fall, are not from the nature of their employment and payment in a position to carry it on to any considerable extent. One must fall back therefore upon health visitors and district nurses. It is needless to say that for such work, persons of intelligence, good education and thorough training are required.

SCHOOLS AND SCHOOL CLOSURE.

The medical inspection of schools and school children of the whole County, with the exception of the Borough of Shrewsbury, is dealt with in a separate report to the Education Committee.

The inspection is carried out by two whole time medical inspectors, and in the Borough of Wenlock by three practitioners. The work is supervised by the County Medical Officer of Health who is also the School Medical Officer. There are no school nurses at present except in the Borough of Wenlock, where they are provided by the Lady Forester Trust.

In the Borough of Shrewsbury the Medical Officer of Health is the School Medical Officer and there is one school nurse.

A scheme of school nursing has been adopted by the County Council.

An inspection of the school premises is made at each visit of the Medical Inspectors, and the recommendations for improving the sanitary conditions are sent to the Secretary for Elementary Education. In the case of voluntary schools, these recommendations are forwarded to the managers for their consideration.

During the year the following cases of infectious disease were notified by the teachers:—

Measles	1075	Chicken-pox	433	Impetigo	256
Whooping Cough	515	Mumps	1070	Scabies	61
Scarlet Fever	249	Ringworm	356	Other Diseases	699
Diphtheria	57				

Under Article 45 (b) the School Medical Officer advised the closure or approved of the closure of 110 schools for the following reasons:—31 for measles, 6 for chicken-pox, 14 for whooping cough, 10 for scarlet fever, 8 for influenza, 3 for diphtheria, 28 for mumps, 4 for sore throats and 6 for other causes.

Under Article 57, no school was closed by the Sanitary Authority on the advice of the District Medical Officers of Health.

Satisfactory arrangements have been made between the District Medical Officers of Health and the School Medical Officer for closure of schools.

BACTERIOLOGICAL DIAGNOSIS OF DISEASE.

Quarters of 1912.	For Typhoid Fever. Widal's Reaction.		For Diphtheria.		For Phthisis.	
	Positive.	Negative.	Positive.	Negative.	Positive.	Negative.
First	0	2	28	108	21	119
Second	0	7	34	79	42	129
Third	3	10	45	144	28	126
Fourth	4	9	86	181	34	105
Whole Year	7	28	193	512	125	479
	35		705		604	

The total number of specimens sent was 1,344, compared with 1,118 in 1912, 1,212 in 1911, 1,424 in 1910, 827 in 1909, 620 in 1908, 497 in 1907, 393 in 1906, and 299 in 1905.

The number of specimens sent for examination shows a marked increase on those of 1912 and 1911. The increase was due to the number of specimens of sputum submitted.

It is very much to be desired, that every case of diphtheria should be examined for freedom from infection, and with this object in view, a letter was written to all medical practitioners in the County, in the year 1908. The following figures for the four quarters of the year 1913 show the extent to which bacteriological examination is used to determine freedom from infection.

Quarters of the year 1913.	Number of Positive Cases.	Number of these cases declared free by bacteriological examination.
First	22	14
Second	28	12
Third	31	14
Fourth	70	42

School children are examined and declared free from diphtheria bacilli before they are allowed back in school.

VACCINATION.

The vaccination table this year is not complete. So far as it goes, it shows a slightly further diminution of vaccination, 58.4 per cent. in 1912 compared with 61.7 in 1911. The number of conscientious objectors also shows an increase.

The condition of vaccination in the County is becoming less and less a protection against small-pox.

DISINFECTION.

Statements are not made in all the reports with regard to the method of carrying out disinfection, but in all or nearly all the districts disinfection of rooms and clothing, so far as means allow, is carried out either by the Sanitary Inspector or directly under his supervision.

The common method of disinfecting rooms is by spraying. In some of the districts the disinfection is carried out by fumigation.

The Sanitary Authorities in the County with steam disinfectors are Bridgnorth Urban, Wellington Urban and Rural, Ludlow Urban and Rural, Whitchurch Urban and Rural, Wem Urban and Rural, Drayton, Atcham, Shrewsbury, Bishop's Castle, and Clun.

The Urban and Rural Districts of Ellesmere have made arrangements for the use of the Wem disinfecter.

If the scheme for the provision of isolation hospitals for the County is carried through, some of the problems with regard to disinfection will be met by the provision of disinfectors at the hospitals.

A steam disinfecter is recommended for Wenlock Borough.

The Medical Officer of Health for Shrewsbury says :—" A steam disinfecter combined with a cleansing station is one of the most important sanitary matters which the Council have got to deal with, and it is to be hoped that before long they will take the question into their serious consideration, and by its provision assist materially in the sanitary administration of the town."

HOSPITAL ACCOMMODATION.

The hospital accommodation and the need for further provision was the subject of a special report during the year 1911.

In this report it was recommended that three hospital areas be formed—one for the east of the county, one for the north, and one for the south-west, and that one central hospital be established for small-pox.

The report was considered and the County Medical Officer was directed to make an inquiry under Sec. 6 of the Isolation Hospitals Act, 1893, as to the necessity for an Isolation Hospital for the districts of Newport Urban and Rural, Wellington Urban and Rural, Oakengates Urban, Dawley Urban, Shifnal Rural, and for that part of the Borough of Wenlock north of the river Severn. On his report a *prima facie* case was found and an inquiry held. As a result an order was made constituting the above named districts, with the exception of the part of the Borough of Wenlock, a hospital district.

A further report was made and an inquiry held as a result of a petition from the Church Stretton Urban District Council. The Urban Districts of Ludlow, Bishop's Castle and Church Stretton, and the Rural Districts of Ludlow, Church Stretton and Clun have been constituted a hospital district.

TABLE VI.
SHOWING VACCINATION OF INFANTS BORN IN 1912 AND FIRST HALF OF 1913.

VACCINATION DISTRICTS.	Births.	Successfully Vaccinated.	Insusceptible of Vaccination.	Certificates of Conscientious Objection.	Died Unvaccinated	Vaccination Postponed.	Removed out of District.	Unaccounted for.	NUMBERS EXPRESSED AS PERCENTAGES OF BIRTHS REGISTERED.		
									Successfully Vaccinated.	Exempted by "Conscientious Objection" Certificates.	Unvaccinated including (1) Conscientious Objectors. (2) Postponed (3) Unaccounted for.
ATCHAM	Not received.					1912.					
BRIDGNORTH	326	196	..	94	16	13	4	3	60.1	28.0	33.7
CHURCH STRETTON ..	104	81	..	14	4	..	5	..	77.9	13.4	13.4
CLEOBURY MORTIMER ..	224	127	..	77	14	4	2	..	56.6	34.3	36.1
CLUN	194	114	..	69	6	1	4	..	58.7	35.5	36.0
DRAYTON (Shropshire Part)	241	166	1	51	16	1	6	..	68.8	21.1	21.5
ELLESMERE	190	139	..	31	13	..	7	..	73.1	16.3	16.3
LUDLOW	369	215	..	115	15	1	23	..	58.2	31.1	31.4
MADELEY	550	334	..	168	37	4	7	..	60.7	30.0	31.2
NEWPORT	186	112	..	62	5	2	5	..	60.2	33.3	34.4
OSWESTRY	598	313	..	199	50	11	8	17	52.3	33.2	37.9
SHIFNAL	249	139	..	62	14	13	12	9	55.8	24.8	33.7
WELLINGTON	692	346	1	279	36	4	25	1	50.0	40.3	41.0
WEM	208	144	..	52	10	1	1	..	69.2	25.0	25.4
WHITCHURCH	Not received.										
PARISHES OF CHIRBURY AND WORTHEN IN THE FORDEN UNION	68	30	..	4	4	..	2	28	44.1	5.8	47.0
TOTAL	4199	2456	2	1277	240	55	111	58	58.4	30.4	33.1
First Six Months of 1913.											
ATCHAM	Not received.										
BRIDGNORTH	163	71	..	61	5	3	2	21	43.5	37.4	52.1
CHURCH STRETTON ..	48	37	..	4	5	1	1	..	77.1	8.3	10.4
CLEOBURY MORTIMER ..	118	61	..	42	3	2	1	9	51.7	35.5	44.9
CLUN	87	49	..	31	4	1	2	..	56.3	35.5	36.7
DRAYTON (Shropshire Part)	109	71	..	29	5	2	2	..	65.1	26.6	28.4
ELLESMERE	98	72	..	16	5	3	1	1	73.4	16.3	20.4
LUDLOW	166	92	..	52	8	7	7	..	55.4	31.3	35.6
MADELEY	292	164	1	109	15	3	..	..	56.1	37.3	38.3
NEWPORT	99	47	..	43	7	2	..	..	47.4	43.4	45.4
OSWESTRY	325	146	..	120	23	7	2	27	44.9	36.9	47.3
SHIFNAL	103	43	..	36	7	..	10	7	41.7	34.9	41.7
WELLINGTON	328	141	..	156	19	6	6	..	42.9	47.5	49.4
WEM	109	67	..	35	5	1	1	..	71.4	32.1	33.0
WHITCHURCH	Not received.										
PARISHES OF CHIRBURY AND WORTHEN IN THE FORDEN UNION	34	9	..	5	2	..	..	18	26.4	14.7	67.6
TOTAL	2079	1070	1	739	113	38	35	83	51.4	35.5	41.3

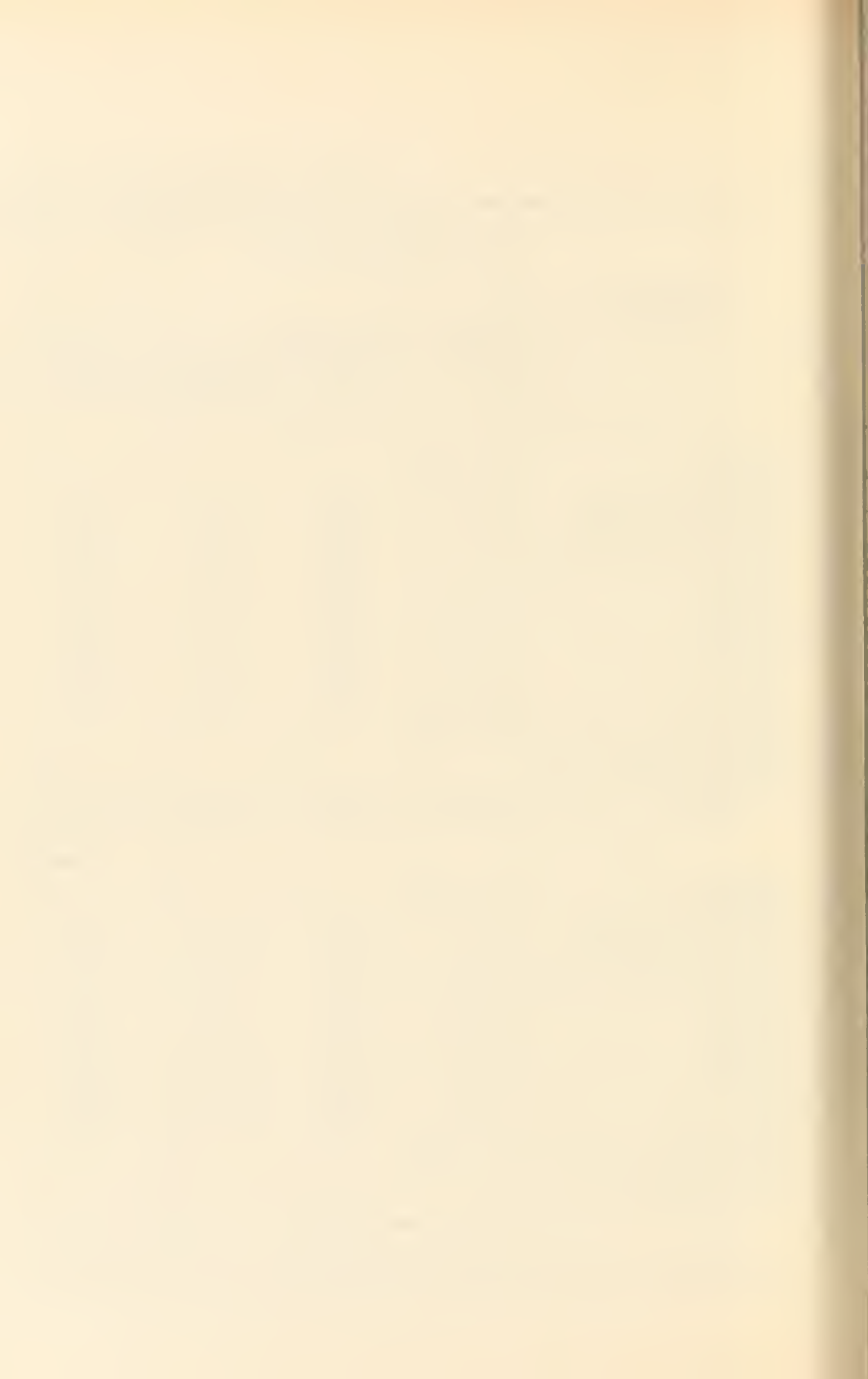


TABLE VII.

A Summary of the Small-pox Hospital Accommodation for the County.

Sanitary Districts served.	Situation of Hospital.	Number of Wards.	Total Cubic space of Wards.	Number of Beds.	Bathing Facilities.	Administration.	Structure.
(1) Chirbury Rural Forden Rural Montgomery Borough ..	Forden Rural District	2	Feet. 11,000	6	No bathroom ; moveable bath ; No taps or drains.	Nurses' sitting room, one bedroom (7 feet by 6 feet 6 inches). Kitchen, pantry, scullery, coalshed, earth closet.	Wood and Iron on brick foundation.
(2) Cleobury Mortimer Rural Burford Rural Rock Rural Tenbury Rural	Cleobury Mortimer	2	11,000	8	None.	3 Nurses' rooms, kitchen, two stores, wash-house.	Double wall of wood , roof covered with iron, on brick foundations.
(3) Ludlow Borough Ludlow Rural	Ludford Parish	2	7,560	6	Detached room, moveable bath; No taps or drain.	Nurses' sitting-room, one bedroom, kitchen, wash-house, larder, ambulance shed.	Wood and iron supported by wooden piles.
(4) Shifnal Rural Dawley Urban	The Nedge Hill, Shifnal Parish	2	15,500	8	Bathroom ; moveable bath ; No taps or drain.	Nurses' sitting-room, two nurses' bedrooms, kitchen, scullery, larder, wash-house, ambulance shed, earth closet.	Wood and iron on brick foundations
(5) Shrewsbury Borough	Underdale Road, Shrewsbury ..	2		6	No bathroom ; moveable bath ; No taps or drain.	Two nurses' bedrooms, and two kitchens in ward blocks. Cottage with 3 bedrooms.	Wood and iron on brick foundations
(6) Teme Rural Knighton Urban Knighton Rural	Knighton Rural District	3	3,224	5	Bathroom ; moveable bath ; No taps or drain.	One kitchen, scullery, one nurses' bedroom, a wash-house, and a discharging room.	Brick.
(7) Wellington Urban Wellington Rural	Wellington Rural District	2	10,800	8	Bathroom ; moveable bath with taps and drain.	Nurses' sitting-room, two nurses' bedrooms, kitchen, scullery, larder, ambulance shed, wash-house, coal store, earth closet.	Wood and iron on brick foundations
(8) Wenlock Borough	The Batches, Broseley	2	9,000	8	Bathroom ; moveable bath with taps and drain.	Nurses' sitting-room, one bedroom, kitchen, scullery, larder, wash-house and coal store.	Wood and iron on brick foundations
(9) Whitchurch Urban Whitchurch Rural Wem Urban Wem Rural Drayton Rural Blore Heath Rural Overton Rural	Prees Higher Heath	2	10,400	8	Bathroom ; moveable bath with taps and drain.	Kitchen in the ward block, and an administration block with 4 rooms for nurses, and a kitchen, scullery, and 2 bedrooms for caretakers.	Wood and iron on brick foundations

Hospital Committees have been appointed and are endeavouring to procure sites.

Of the three areas recommended in the report made in 1911, only one remains to be dealt with.

Existing Isolation Accommodation.—(1) *For diseases other than small-pox.*—This consists of (1) a hospital at Shrewsbury, with 20 beds for scarlet fever; 4 beds for a second disease, and 2 beds for a third disease; (2) a small hospital at Bridgnorth, also used for small-pox; (3) a hospital of 4 beds for the Newport Urban District; (4) a hospital of 8 beds at Market Drayton for the Drayton and Blore Heath Rural Districts.

(2) *For Small-pox.*—On Table VII. is given a summary of the small-pox hospital accommodation in the County.

In addition, the Atcham Rural District Council has a Berthon Hut and a small tent, but no site. The Oswestry Urban and Rural District Councils have each a site available for a hospital. Newport Urban and Rural Districts have an arrangement for the erection of a tent.

The districts without any hospital accommodation for small-pox are :—

URBAN.				RURAL.			
Population at 1911 Census.				Population at 1911 Census.			
Bishop's Castle	..	..	.. 1409	Atcham	..	..	.. 21770
Bridgnorth	..	..	.. 5768	Bridgnorth	..	..	.. 9125
Church Stretton	..	..	.. 1455	Church Stretton	..	..	.. 4797
Ellesmere	..	..	.. 1946	Clun	..	..	.. 6565
Newport	..	..	.. 3250	Ellesmere	..	..	.. 8365
Oakengates	..	..	.. 11744	Newport	..	..	.. 6005
Oswestry	..	..	.. 9991	Oswestry	..	..	.. 15442
35563				72069			

Total population of districts without hospital accommodation for small-pox—107,632.

Nearly half the County is without any hospital accommodation for small-pox, and many of the existing hospitals cannot be said to be sufficiently ready for an emergency. As a complement to the present small-pox hospital accommodation, there can be no doubt that a central Hospital always ready would be of great value. It is absolutely essential that no obstacle should be put in the way of dealing with the first case of small-pox that should occur, but that on the contrary every facility should be placed at the disposal of the Medical Officer of Health in dealing with initial and doubtful cases.

Until some central provision is made, an arrangement should be entered into by those sanitary districts without provision, for use in case of emergency of the hospitals already in existence. Such an arrangement would probably take the form of a retaining fee and a charge per week for each patient admitted. Such a payment would probably enable the owners of the hospitals to put them into greater readiness without further expense to the district.

HOUSE ACCOMMODATION.

HOUSING AND TOWN PLANNING, ETC., ACT.

The Housing and Town Planning Act has now been in force for three years, and the regulations under which inspection is carried out were issued in September, 1910.

The work under this Act is set out in Table IX.

Number of Inspections.—The total number of inspections in the County under the Regulations during 1913 was 2,931. Unless the houses for detailed inspection were carefully selected after a preliminary superficial inspection, this number must be considered quite inadequate.

Number of Representations of Unfitness for Habitation.—The number of these representations was 101, or 3.4 per cent. of those inspected. This percentage was 28 in Cleobury Mortimer, 41 in Dawley, 9 in Oswestry Urban, 6 in Bridgnorth Rural, and 6 in Oakengates Urban. It is evident that in these districts a careful selection must have been made of houses for inspection.

On the other hand no representation of unfitness for habitation were made in the following districts:—*Rural*—Burford, Church Stretton, Clun, Drayton, Ellesmere, Ludlow, Newport, Oswestry, Wellington, and Whitchurch. *Urban*—Bishop's Castle, Ellesmere, Newport, and Wenlock.

The failure to discover a single house that is unfit for habitation in a district during the year must indicate either an insufficient inspection or a high standard of housing.

Number of Closing Orders made.—The total number of these made in the whole County was 64, or not quite two-thirds the number of representations made. In Atcham 8 representations were made and three closing orders; in Cleobury Mortimer nine representations and no closing order; in Ludlow Borough 10 representations and three closing orders; in Oswestry Borough nine representations and three closing orders; in Shrewsbury five representations and no closing orders.

In Shrewsbury it is stated that the scarcity of houses prevented any closing orders being made, and the same condition may have operated in some of the other districts.

In the whole of the rural districts only 12 closing orders were made.

Under Sec. 69 of the Housing and Town Planning Act it is the duty of a Clerk of the Rural District Council to "forward to the medical officer of health of the County a copy of any representation, complaint, or information, a copy of which it is the duty of the District Council to forward to the County Council under Section 45 of the Housing of the Working Classes Act, 1890."

The object of this section is to enable the County Medical Officer of Health to follow up the representations and find out whether they have been properly acted upon. The reports of the District Medical Officers now received show that in many rural districts these representations have not been forwarded.

Of the 64 houses closed, 5 were put into a fit state for habitation, leaving a balance of 59 that should in accordance with the Act have been demolished. The actual number of demolition orders made was 10, and the actual number pulled down was 12.

The amount of work done to improve the existing houses is probably a better criterion of the effect of the Act than the number of houses closed. Still for the general levelling up of the housing conditions it is essential that the bad houses should be closed, and it cannot be said that the permanent closure of 59 out of 55,000 houses is a satisfactory record of the year's work. No doubt the great obstacle to the more vigorous prosecution of this work is the absence of alternative accommodation.

TABLE VIII.

Record of Sanitary Work done during the Year 1913.

Table showing the work done by the various Sanitary Inspectors; the returns are made on a uniform plan as far as possible.

SANITARY AUTHORITY.				Number of houses which have been inspected during the year, either in connection with outbreaks of Infectious Disease, or in consequence of complaints, or in course of a Systematic Sanitary Survey.	Total number of notices of all kinds served, including both formal and informal notices.	Number of such notices complied with.	Letters written.	PARTICULARS OF SANITARY MATTERS REFERRED TO IN THE ABOVE NOTICES.								Houses disinfected after infectious disease (other than phthisis).	Houses disinfected in cases of phthisis.	Privies converted to water closets.	Privies converted to earth closets.	Plans for New Houses passed.	Certificates issued for water supply to New Houses.	Houses connected to public water Supply.	Repairs to Public Pumps and Wells.	New Public Wells.	Private Wells reconstructed or improved.	Houses connected to Public Sewerage.	Lengths of New Sewers laid.	Lengths of New Water Mains laid.	Proceedings before Magistrates.
Houses to be disinfected after Infectious Disease.	Deficient or objectionable Water Supply.	New Drains to be constructed or old drains to be amended.	New Closets to be provided or old ones to be amended in construction.					Houses damp, dirty, or admitting rain, or weather, or otherwise in a bad sanitary condition.	Offensive accumulations of all kinds.	Animals so kept as to be a Nuisance.	Houses overcrowded.																		
RURAL DISTRICTS.																													
Atcham	713	260	240	489	..	109	208	253	116	56	19	12	13	9	2	133	17	14	5	10	..	14	44	2½ miles	..	..			
Bridgnorth	950	106	104	..	25	8	26	16	30	8	..	2	25	..	..	..	..	13	..	..	..	14	..	..	..	..			
Burford	10	10	7	9	4	2	2	3	..	1	2	..	4	..	..	..	2	2	2	1	..	..	..	..	..	..			
Chirbury	241	73	44	..	13	..	8	17	4	16	..	..	6	7	..	8	..	1	..	2	..	..	..	..	..	..			
Church Stretton	211	29	25	113	..	7	11	7	2	..	..	1	26	..	..	..	..	..	4	1	..	3	..	..	..	..			
Cleobury Mortimer	97	10	10	79	9	2	11	5	23	2	11	6	..	..	3	..	246	13	3	..	..	..	..	..	..	..			
Clun	175	55	48	81	..	5	14	6	29	1	1	..	7	4	..	5	..	..	15	..	..	3	..	..	..	..			
Drayton	630	232	221	..	24	28	79	75	34	27	2	3	24	..	31	4	4	..	..	..	26	..	..	30 yds.	..	..			
Ellesmere	107	38	30	183	14	5	10	12	18	2	1	..	18	..	..	9	9	9	..	1	..	8	..	..	4 miles	1			
Ludlow	71	49	28	59	29	16	29	2	10	..	..	1	30	2	0	2	8	8	2	0	0	16	2	..	..	..			
Newport	237	7	4	197	3	3	20	12	17	2	..	8	10	..	..	20	..	..	1	..	..	2	..	..	..	..			
Oswestry	830	242	150	430	72	12	87	13	6	19	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
Shifnal	685	128	119	170	24	4	56	19	11	22	5	2	20	3	15	..	5	2	12	..	1	..	1	2 lnghs.	..	..			
Teme	100	6	6	5	5	..	6	..	4	..	..	..	4	1	..	..	..	..	..	..	..	..	..	..	..	..			
Wellington	166	45	41	14	64	185	30	14	..	11	..	3	64	10	3	..	..	11	..	..	..	..	..	..	..	..			
Wem	968	66	66	210	6	37	56	47	48	7	..	1	12	1	..	..	6	6	1	2	..	..	..	..	..	..			
Whitchurch	97	28	18	30	1	3	10	17	5	2	1	2	1	..	..	..	2	..	7	2	..	3	..	..	860 yds. 1	..			
URBAN DISTRICTS.																													
Bishop's Castle	185	38	28	12	..	5	14	5	1	7	..	1	18	2	6	..	1	..	1	..	..	3	..	..	..	..			
Bridgnorth	950	32	30	33	8	6	9	7	5	7	3	8	4	5	..	..	21	..	13	2	..	1	..	..	120 yds.	..			
Church Stretton	183	61	61	102	..	..	4	..	..	4	..	2	13	1	..	1	4	..	..	..	..	1	100 yds.	..	..	..			
Dawley	166	166	2	400	11	..	92	45	60	65	..	5	5	6	16	3	1	..	7	..	..	22	510 yds.	..	..	..			
Ellesmere	15	12	12	37	15	..	2	3	2	3	..	..	..	..	..	..	..	..	4	..	..	2	..	..	..	..			
Ludlow	237	118	35	48	9	..	16	13	84	3	4	3	13	6	13	..	16	16	16	..	..	16	..	..	..	..			
Newport	178	48	41	137	3	..	14	19	12	21	4	3	..	3	27	..	..	..	31	..	..	40	1443 yds.	248 yds.	..	..			
Oakengates	70	172	121	150	20	21	69	66	85	16	4	8	20	4	11	8	10	10	60	..	..	28	3000 yds.	250 yds.	..	..			
Oswestry	1200	155	150	45	..	..	89	24	6	9	1	1	34	6	..	..	3	3	3	..	..	3	..	..	34 yds.	..			
Shrewsbury	4882	547	375	469	215	..	462	70	449	38	19	46	169	29	..	..	129	..	..	..	..	..	..	..	..	3			
Wellington	446	192	92	171	14	..	11	22	21	4	4	6	14	5	15	..	19	19	22	..	..	19	..	..	..	3			
Wem	312	177	175	12	9	..	52	40	59	810 loads	3	2	9	1	9	3	10	10	9	..	..	8	..	..	..	..			
Wenlock	1146	134	93	528	..	16	79	73	56	121	7	7	34	15	..	..	..	..	35	..	..	66	..	560 yds.	..	..			
Whitchurch	320	124	107	52	21	2	40	16	11	11	2	3	32	3	9	..	16	..	17	..	..	..	..	240 yds.	..	..			

TABLE IX.
HOUSING AND TOWN PLANNING, ETC., ACT, 1909.
REGULATIONS UNDER SECTION 17 ARTICLE V.
Analysis of Work done in the year under these Regulations.

SANITARY AUTHORITY.	Number of houses inspected.	Number of houses thought to be unfit for human habitation.	Number of representations to Sanitary Authority of unfitness.	Number of closing orders made.	Number of houses in which defects were remedied without closing orders.	Number of houses put into a fit state after closure.	Number of demolition orders made.	Number of these houses pulled down.	Number of houses still under consideration.	General character of defects found in course of this inspection.											
										Water Supply.	Closet accommodation.	Drainage.	Defects of dwelling house in regard to				Paving, Draining, and sanitary condition of yard or outhouse.	Arrangements for deposit and disposal of house refuse.	Rooms unfit for habitation under Sec. 17 (7).	Other defects.	
													(a) Light.	(b) Free circulation of air.	(c) Dampness.	(d) Cleanliness.					
RURAL DISTRICTS.																					
Atcham	520	8	8	3	279	1	..	..	54	88	216	176	72	44	95	52	129	..	..	250	
Bridgnorth .. .	120	8	8	5	3	1	..	..	..	8	16	26	1	7	12	4	7	..	..	..	
Burford	10	..	..	..	10	..	..	..	..	..	2	2	..	..	2	2	2	..	..	..	
Chirbury	37	1	1	..	9	..	..	..	28	1	9	7	1	2	4	4	4	3	..	..	
Church Stretton ..	49	..	..	..	10	..	..	..	3	4	1	7	1	..	..	..	..	..	..	..	
Cleobury Mortimer ..	32	9	9	..	..	..	7	..	9	10	9	30	20	..	32	..	several	..	..	..	
Clun	51	..	..	..	11	..	..	..	4	3	3	5	3	6	10	1	4	..	..	8	
Drayton	103	6	..	..	62	..	..	..	29	26	62	45	..	43	14	6	38	77	..	19	
Ellesmere	38	..	..	..	..	..	..	..	..	5	12	10	8	8	18	..	12	2	..	..	
Ludlow	71	..	..	..	28	..	..	..	25	15	3	43	..	..	..	..	..	..	..	..	
Newport	62	..	..	..	51	..	..	..	72	13	25	23	5	42	22	8	7	1	..	119	
Oswestry	91	..	..	..	60	..	..	..	..	6	15	35	62	21	10	7	52	..	..	43	
Shi.nal	54	2	2	2	26	..	..	..	18	3	21	19	3	..	2	11	12	9	..	8	
Teme	80	1	1	1	4	..	..	..	1	..	..	2	4				..	..	..	..	
Wellington	56	43	..	..	40	..	..	..	3	..	20	35	3	..	12	..	..	..	..	22	
Wem	148	1	1	1	..	..	..	..	..	37	39	48	..	17	46	..	61	..	..	..	
Whitchurch	40	..	..	..	21	..	..	..	14	8	12	17	9	6	4	3	7	..	..	23	
URBAN DISTRICTS.																					
Bishop's Castle ..	11	..	..	..	5	..	..	..	6	1	3	4	..	..	4	..	5	..	..	..	
Bridgnorth	42	9	9	9	10	2	..	..	..	4	..	3	9	9	13	4	6	3	10	12	
Church Stretton ..	10	1	1	1	9	..	..	..	6	..	..	1	..	..	1	9	..	..	..	..	
Dawley	12	4	*23	23	34	1	..	..	40	..	12	12	2	4	12	3	3	11	..	..	
Ellesmere	6	..	..	..	6	..	..	..	..	..	3	2	..	2	..	2	2	..	..	..	
Ludlow	159	10	10	3	46	..	1	1	102	2	41	54	32	19	30	16	64	49	..	84	
Newport	8	..	..	..	5	..	2	3	64	..	6	4	7	1	5	..	2	..	..	5	
Oakengates	132	8	8	8	45	..	..	..	95	..	58	45	56	46	86	24	44	42	18	32	
Oswestry	102	9	9	3	47	..	..	..	16	..	43	20	10	20	39	58	44	..	..	33	
Shrewsbury	421	..	5	..	..	..	..	..	..	..	333		186		160	218	398	406	..	729	
Wellington	131	4	4	4	69	..	..	..	47	..	3	15	..	..	14	9	58	..	..	27	
Wem	159	1	1	1	119	..	..	..	..	..	39	40	3	6	42	4	57	2	..	..	
Wenlock	75	..	..	..	28	..	..	..	41	14	41	44	4	13	19	14	22	24	..	59	
Whitchurch	101	1	1	..	32	..	..	8	26	..	18	8	2	3	7	3	3	36	..	86	
Total	2931	126	101	64	1069	5	10	12	703	..	..	..	..	..	..	..	..	..	..	..	

* Eighteen of these houses were inspected in 1912.

Defects remedied without Closure.—The table shows that a considerable amount of work has been effected and that improvements have been brought about in roughly two per cent. of the houses of the County. It is doubtful, however, if such an amount of work will bring about any radical improvement.

Houses still under consideration.—From the large proportion of the houses inspected that are still under consideration, it does not appear, at least in some districts, that the Councils are exercising dispatch in carrying out this work. The great difficulties in dealing promptly with insanitary houses must be recognised, and every allowance should be made. The worst instance of delay is to be found in the Newport Urban District. Sixty-four houses mostly inspected in the year 1911 are still under consideration. Dr. Gepp, reporting on this matter, says :—“ Little progress has so far been made in the use of this inspection to bring about effective improvement in the condition of house property. Ninety-five houses have been inspected and reported on in the past three years, of which 64 still ‘ remained under consideration ’ at the end of last year. I have nothing to add to the recommendations I have already made in the matter.”

Reviewing the work under the Act for the whole County it appears to fall short of what is desirable in three particulars—

- (1) The amount of inspection.
- (2) The number of houses closed.
- (3) Promptness of action by the Councils.

The small amount of inspection is no doubt due to a great extent to the limited time that the Sanitary Inspectors have available for this work. The work under the Housing and Town Planning Act and much other additional work has been put upon the Sanitary Inspector in recent years without any additional facilities for carrying it out. Under such circumstances one cannot expect that this important Act will be carried out in a satisfactory manner. In districts where the work of sanitary inspector and road surveyor is combined, the sanitary work frequently suffers.

This is a matter that the County Council are directly interested in, because the Council pays half the salary of the Sanitary Inspector and consequently can insist that a proper proportion of the time of the Sanitary Inspector be given up to sanitary work.

The following quotations from the District Medical Officers' Reports deal with the necessity for the building of cottages by the District Councils or describe schemes in hand. :—

Atcham.—“ Consideration of these figures and those of ‘ overcrowding,’ to which I have referred while not indicating any alarming conditions of housing in the District, points definitely in my opinion to the eminent desirability of the Council taking a progressive view of the question, and of steadily keeping a building and re-housing policy in view.”

Cressage.—A loan of £993 has been sanctioned by the Local Government Board for building six houses.

Withington.—A loan of £425 has been sanctioned by the Local Government Board for the purchase and improvement of eight houses which have been represented as unfit for habitation owing to deficiencies of air space and ventilation. Three pairs of houses were converted to three through houses and the remaining two, improved as regards their lighting and ventilation.

Church Stretton Urban.—“ The Council has under consideration a scheme for the purchase of land and the erection of a number of houses for the working classes.”

Cleobury Mortimer Rural.—"Overcrowding is frequently met with, because the accommodation is very scanty in the cottages, usually only two bedrooms, and there are few if any, new cottages built to meet the requirements of the workers at the quarries. It seems to me that the position should be fully explained to the ground landlords and to the owners of the quarries, and if they decline to provide adequate housing accommodation for the workmen then the Council should seriously consider the matter."

Ludlow Urban.—" in the interests of public health an improvement in the standard of cottage property in certain parts of the Borough is necessary, and this can only be brought about by the provision of a certain number of new cottages and the demolition of a number of the worst ones."

Ludlow Rural.—"But the number that have ceased to be healthy habitations is considerable, and further buildings for this reason is required in certain parts, of which the Clee Hill is the most imperative."

Newport Rural.—"The Inspector reports that houses with three or more bedrooms are much needed in the Donnington Wood area, in order to make it practicable to remedy overcrowding, of which he has found and reported a number of instances in recent years."

"No new houses were erected in the District during the year. Having regard to the foregoing evidence as to deficient house room accommodation, and to the fact that old cottage property tends to decay and to become unfit for habitation, while little or no new building takes place, *it would be well in my opinion for the Council to consider seriously their powers and duties as to providing houses for the working classes.*"

Oakengates Urban.—"The building of houses by the private individual is very spasmodic, and in a district which is steadily growing, it fails to meet the demand by a long way. When to this is added the fact that many of the existing cottages are of such an age, that their repairs involves the re-building of them, and the owners prefer in many instances to close and demolish them, it will be seen that the position is one that can only be met by the Council undertaking to provide additional housing accommodation. Cases of overcrowding are of frequent occurrence and most difficult to deal with without penalising tenants for a condition of things for which they are not responsible, viz., the absence of alternative dwellings."

Shrewsbury Urban.—"A scheme for the erection of 63 houses in Ditherington is in hand. The continued scarcity of houses has prevented the closure of any in 1913."

Wellington Urban.—"The 22 cottages which the Council are building will be a great boon to the district, and will enable more active measures to be taken in regard to some of the worst cottages."

Wenlock Urban.—"The building of new houses both to provide for re-placing and worn-out and decaying old property, and for furnishing additional accommodation to relieve conditions of overcrowding would, if found practicable, offer the best solution of existing difficulties. The relative over-population of houses has had a probable relation to the higher incidence and death-rate of tuberculosis in the Borough."

Volume VIII. of the census of England and Wales published in 1913 contains much information concerning houses which will undoubtedly be most useful to Sanitary Authorities and others interested in the housing of the working classes. By means of these tables it is possible to estimate roughly the relative position of districts with regard to housing and overcrowding, and to indicate with some accuracy the worst districts.

For the purpose of the census a room includes, a kitchen, but not a scullery, landing, lobby, closet, bathroom, warehouse, office or shop.

In England and Wales 75 per cent. of the population live in tenements of 3—6 rooms ; only 1.4 per cent. in one-roomed tenements, and 6.1 per cent. in two-roomed tenements.

Those tenements are spoken of as "overcrowded" in which there are more than two persons per room. In many individual instances this may be quite incorrect, owing to the size of the room, but as a whole it is probably a safe guide. On this basis 9 per cent. of the tenements of England and Wales were overcrowded.

The proportion of tenements with less than four rooms is much higher in Urban than Rural Districts.

ENGLAND AND WALES.

Percentage of

Tenements with one room.			Tenements with two rooms.			Tenements with three rooms.		
Urban Districts	..	4.0		9.1			14.2	
Rural Districts	..	.6		5.6			13.0	

In last year's report, tables were given for the County and for the combined urban and rural districts showing the number of occupants in tenements classified according to the number of rooms.

It is now possible to give further details.

TABLE II.
TENEMENTS "OVERCROWDED," *i.e.* WITH MORE THAN 2 OCCUPANTS
PER ROOM.

Urban Districts.				Rural Districts.			
	Number.	Population in these tenements.	Proportion percentage of total population in private families.		Number.	Population in these tenements.	Proportion percentage of total population in private families.
Bishop's Castle ..	5	40	3.0	Atcham	182	1,495	7.3
Bridgnorth	66	563	10.1	Bridgnorth	90	704	7.8
Church Stretton ..	3	20	1.7	Burford	12	97	7.7
Crawley	164	1,415	18.4	Chirbury	23	180	5.5
Ellesmere	6	51	2.8	Church Stretton ..	49	399	8.5
Ludlow	67	541	9.6	Cleobury Mortimer ..	77	661	9.7
Newport	33	280	9.1	Clun	47	380	5.8
Shakengates	241	1,974	16.9	Drayton	55	419	3.5
Oswestry	66	541	5.6	Ellesmere	67	548	6.8
Shrewsbury	261	2,131	7.6	Ludlow	91	739	7.9
Wellington	80	618	8.5	Newport	101	819	13.7
Wem	13	118	5.5	Oswestry	172	1,387	9.1
Wenlock	238	1,922	12.8	Shifnal	98	795	9.9
Whitchurch	47	379	6.8	Teme	12	92	5.6
				Wellington	147	1,216	11.1
				Wem	40	317	3.8
				Whitchurch	6	46	2.4
Total of Urban Districts ..	1,290	10,593	10.0	Total of Rural Districts ..	1,269	10,294	7.7

This table, although it does not take into account the "character" of the houses in the districts, undoubtedly gives a good idea as to the relative amount of overcrowding in the different districts, and enables us to form a rough estimate of the absolute amount of overcrowding.

The outstanding features are the excess of overcrowding in the mining and manufacturing districts and the comparatively small amount in the strictly rural districts.

The amount of overcrowding is very excessive in Dawley Urban District, Oakengates Urban District, Newport Rural District, Wenlock Borough, and Newport and Wellington Rural Districts.

In the two Rural Districts (Newport and Wellington), if it were possible to separate the agricultural part from the manufacturing part, very excessive overcrowding would probably be found in the latter.

The overcrowding in the Cleobury Mortimer Rural District is no doubt due to a great extent to the overcrowding on the Clee Hill, which, if stated separately, would probably be very excessive.

The high figure for Shifnal is not readily explainable, nor is the comparatively high figure for Church Stretton Rural. The figures for the purely agricultural districts to the north of the County are very low, *e.g.*, Drayton 3.5, Whitchurch 2.4, Wem 3.8, Ellesmere 6.8.

Of the Urban Districts, omitting the mining and manufacturing districts of Dawley, Oakengates, and Wenlock, the highest percentages of overcrowding are in Bridgnorth 10.1, Ludlow 9.6, Newport 9.1.

The following tables relating to the County of Salop, taken from the 1911 census, give most important information with regard to the size of tenements and the number of persons occupying them :—

TENEMENTS OF VARIOUS SIZES IN THE COUNTY OF SALOP AND ENGLAND AND WALES,
STATED AS PROPORTION OF 1,000 TENEMENTS.

	Proportion, per 1,000 Tenements, of Tenements consisting of :—									
	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	10 rooms or more
<i>Shropshire :—</i>										
Administrative County..	4	54	228	238	184	101	56	41	27	67
Total of Urban Districts	4	59	227	218	193	117	63	44	26	49
Total of Rural Districts	4	49	230	254	176	88	51	39	27	82
<i>England and Wales</i>	32	83	139	250	207	137	59	35	20	38
Total of Urban Districts (exclusive of County Boroughs)	15	64	114	250	234	159	68	37	21	38
Total of Rural Districts	6	55	130	279	218	123	62	45	25	57

PERSONS IN TENEMENTS OF VARIOUS SIZES IN THE COUNTY OF SALOP AND ENGLAND AND WALES,
STATED AS PROPORTION OF 1,000 PERSONS.

	Proportion, per 1,000 persons, enumerated in Tenements consisting of :—									
	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	10 rooms or more
<i>Shropshire :—</i>										
Administrative County..	1	30	206	235	190	104	59	47	32	96
Total of Urban Districts	1	35	213	220	203	122	65	47	30	64
Total of Rural Districts	1	27	201	246	178	91	54	46	34	122
<i>England and Wales</i>										
Total of Urban Districts (exclusive of County Boroughs) ..	14	61	128	247	224	148	64	40	23	51
Total of Rural Districts	6	45	103	245	251	168	72	39	23	48
	2	36	112	264	229	129	67	51	30	80

AVERAGE NUMBER OF OCCUPANTS PER ROOM IN TENEMENTS OF VARIOUS SIZES, IN THE COUNTY OF SALOP AND ENGLAND AND WALES.

	Average number of Occupants per Room consisting of :—									
	1 room	2 rooms	3 rooms	4 rooms	5 rooms	6 rooms	7 rooms	8 rooms	9 rooms	1 to 9 rooms
<i>Shropshire :—</i>										
Administrative County..	1.22	1.25	1.32	1.08	0.90	0.75	0.66	0.62	0.59	0.94
Total of Urban Districts	1.19	1.26	1.36	1.09	0.91	0.75	0.64	0.58	0.55	0.92
Total of Rural Districts	1.25	1.23	1.29	1.07	0.90	0.76	0.68	0.66	0.63	0.94
<i>England and Wales</i>										
Total of Urban Districts (exclusive of County Boroughs) ..	1.90	1.59	1.33	1.08	0.95	0.78	0.68	0.61	0.56	0.95
Total of Rural Districts	1.72	1.53	1.33	1.08	0.94	0.78	0.67	0.59	0.54	0.92
	1.57	1.40	1.24	1.02	0.90	0.76	0.66	0.61	0.57	0.89

WATER SUPPLIES.

The following statement shows the work that has been done during the year to improve the water supplies in the County and the suggestions made for further improvements :—

Schemes of Water Supply or of Improvement to Water Supplies that have been initiated, partly carried out, or completed during the year—

Bayston Hill (Atcham Rural District).—Extension of main to the Sharpstones Lane to be carried out in the spring.

Ryton (Atcham Rural District).—The lower part of the village has now an ample supply of water from a tube well 96 feet deep.

Arcscott, Eaton Constantine (Atcham Rural District).—Boring operations for a new well are in progress.

Coalpits, Eaton Constantine (Atcham Rural District).—The water supply to seven houses having been found unsatisfactory, another supply has been laid on from a spring well of proper construction on the high ground. The water will be piped to a tap in a convenient position.

Marton (Chirbury).—The scheme sanctioned by the Local Government Board for the supply of Marton has been carried out.

Dudleston Heath (Ellesmere Rural District).—A supply to this District from the Liverpool mains has been completed during the year.

Craven Arms (Ludlow Rural District).—The scheme of water supply submitted to the Local Government Board has been commenced, and it is hoped that the works will be completed this year.

Oswestry Borough.—"Works have now commenced for the construction of an additional water main from Rhydycroesau that will bring the water over the Racecourse Hill, from our big reservoir in larger volume, so that we may utilise water often running to waste over the dam at Penygwely."

Redlake and Upper Part of Wellington Rural Parish (Wellington Rural District).—This scheme has been approved by the Local Government Board and is now in progress.

Tilley (Wem Rural District).—A scheme of supply from the Council's mains has been completed.

Whixall (Wem Rural District).—A scheme for supplying this district by means of nine pumps has been submitted to the Local Government Board and approved.

New Schemes or improvement of existing supplies under consideration :—

Church Stretton Rural.—The supply of the village of Longnor by the owner from springs on Lawley Hill.

Clun Rural District.—The supply of Chapel Lawn from springs above Pentre.

Drayton Rural District.—A supply from Norton-in-Hales.

Prees (Wem Rural District).—A supply to this village from a private source.

Recommendations of new Schemes of supply or for the improvement of existing Schemes :—

Church Stretton Urban.—The following recommendations have been made :—(1) The taking of the whole supply from the large reservoir, (2) consideration of increasing storage or providing filtration for water from small reservoir, (3) arrangements for regular inspection of the banks of the streams and for removal of objectionable matter, (4) the desirability of periodical chemical and bacteriological analyses of the water. Arrangements have been made for the regular inspection of the reservoirs and banks of the contributory streams, and the question of supplying all consumers from the large reservoir is under consideration.

Church Stretton Rural.—It is recommended that the School supply at Cardington be improved by laying a drawpipe at St. James's well and the erection of a pump for the school.

Cleobury Mortimer Rural.—A supply to houses on the Clee Hill, in both this district and the Ludlow Rural District.

Oakengates—steps to remedy the deficiency in pressure in the upper parts of the district. “*Bucknell* (Teme Rural District) is still without a safe and adequate supply”

Applications made to the Local Government Board for loans for purpose of water supply in the year 1913 :—

£1,500 for the supply of the villages of Worthen and Brockton.

£1,900 for the supply of Redlake and district in the Wellington Rural Parish.

The foregoing statement shows that fair progress is being made with the improvement of the supplies to towns and villages. Little is, however, being done with regard to the improvement of supplies to individual houses or small groups of houses. A considerable proportion of these supplies are very grossly polluted, and many can only be described as imperfectly filtered sewage. The only method of dealing with these supplies is to carry out a careful and systematic house to house inspection, and to insist upon the removal of sources of pollution and the proper construction of wells. In those cases where houses with defective supplies are more or less grouped together the most practical plan will often be for the District Council to provide a public well and pumps properly placed, and to rate the users.

It will be seen by reference to Table IX. that the number of notices served for the improvement of water supplies under the Housing and Town Planning Act was 248. A certain additional number of notices were served under the Public Health Acts, but it hardly appears that the amount of inspection and the action taken is sufficient to produce any radical improvement in the water supplies of individual houses.

IMPORTANCE OF A PURE WATER SUPPLY.

WATER SUPPLY AND GOITRE.

The harm done by polluted water supplies is usually measured by the amount of epidemic diseases (cholera and typhoid fever) that is produced by them. It follows from this assumption that if none of the known water borne diseases are prevalent in the area, no harm is being done.

This undoubtedly is a very serious error.

Unless there is a clean and abundant water supply absolutely above suspicion, it is impossible to inculcate into the people the idea that water is the natural and should be the principal drink. In many of the country districts of the County, at house after house, one is informed that water is never drunk. Some of the more or less harmful concoctions—alcoholic or non-alcoholic are taken instead. It is essential that children in particular should have free access to water quite above suspicion, and in this connection it is obvious that school supplies are of the utmost importance. It is probable that too much stress cannot be laid upon the formation of correct habits in this respect in early childhood.

That the evils of polluted water are not limited to the spread of infectious disease is proved by the influence of water in the production of goitre. It has long been known that much, if not all, endemic goitre is produced by a poison of some kind contained in drinking water, and that the poison is removed or destroyed by filtering or boiling. Some recent researches seem to indicate that the poison is a bacillus coli derived from faecal matter and altered to some extent whilst in the water. If this observation proves to be accurate, the presence of goitre in a locality or in connection with a house will be a matter of the greatest importance to a sanitary authority.

The influence of the thyroid gland (the gland which when enlarged is called "a goitre") on the economy of the body, is profound and the changes that take place in the body either from over activity or from decreased activity are often disastrous. If, therefore, these conditions can be shown to be due even partly to a defective sanitary condition which can be remedied, a great advance will have been made and a further field of activity opened up for sanitary authorities.

The incidence of goitre amongst school children for the County is given in the report of the School Medical Officer. The inspection shows that 1.4 per cent. of the children show well marked signs of goitre, and 7.0 per cent. very slight signs.

EXCREMENT DISPOSAL.

Speaking generally the method of disposal of excreta in the country districts is by means of privies with underground vaults. In towns where there is a system of sewers and a water supply, water-closets are becoming each year more exclusively the method of disposal.

As stated in my previous reports, the aim that sanitary authorities should keep in view are—

- 1.—In districts with a good system of sewers, sewage disposal, and water supply, **to make the water carriage system of excrement disposal universal.** The success of this system depends to a great extent on the care and precautions with which it is carried out.
- 2.—In districts without sewers or water supply, to make a good type of earth closet universal.

The following table published in the Annual Report for 1912 has been brought up to date so far as possible. It shows to what extent the sanitary authorities are endeavouring to make the water-carriage system universal in districts with sewers and water supplies.

<i>Urban Districts.</i>				Water-closets.	Earth-closets.	Privies.	Privies converted to water-closets or abolished.			
							1913	1912	1911	1910
Bishop's Castle (town proper)	..	..	219	6	44	6	10	6	49	
Bridgnorth (town proper)	..	practically all.		3	2	—	—	—	—	
Church Stretton	..	..	285	15	19	3	—	1	3	
Ellesmere	..	..	mostly water-closets.	—	20	—	—	—	—	
Ludlow	..	..	All water-closets except	93	13	16	—	—	—	
Newport	..	..	..	597	18	210	27	24	33	36
Oakengates	..	..	..	305	338	1187	11	18	22	20
Oswestry	..	..	..	2400	16	24*	—	—	—	—
Shrewsbury	..	..	..	..	Practically all water-closets..		—	—	—	—
Wellington	..	..	..	880	0	250	15	34	15	10
Wem	..	..	..	198	415	3	9	15	10	5
Whitchurch	..	..	..	1065	22	238	9	10	4	0
<i>Towns or Villages in Rural Areas.</i>										
Shifnal	..	..	..	379	35	107	17	34	38	9
Market Drayton and Little Drayton	..	..	..	888	26	375	31	25	28	14
Craven Arms	..	..	..	177	0	16	—	2	0	0
Hadley	..	..	..	—	—	—	—	—	—	—
Meole Brace	..	..	..	300	28	6	—	—	—	—

* The privies and pail closets, with one exception, are outside the drainage area.

It must be borne in mind that a certain proportion of the privies are beyond the sewered area and therefore cannot be dealt with. It would add much to the value of this table if the number of privies inside and outside the sewered area were stated.

In some districts information is available with regard to this point, *e.g.*, only 65 out of the 138 privies in the Whitchurch Urban District are in the "town proper." The figures given in the table with regard to Bishop's Castle and Bridgnorth do not include the outlying parts of the town. Of the 20 privies in the Ellesmere Urban District 14 are on the outskirts.

It is obvious from the table, that whilst in some districts the type of the closet accommodation is satisfactory, in others there is a large amount of work to be done. Amongst the latter is the Urban District of Oakengates. It must, however, be acknowledged that there are special difficulties in this district tending to make the progress slow.

It is not satisfactory that there should still be 250 privies in the compact little town of Wellington, and that there should only have been 15 conversions during the year.

A greater effort should be made in Newport Urban District where 210 privies still exist, and only 27 were converted during the year.

It should be the aim of all sanitary authorities of towns to get rid of privies within a limited time.

Of the districts in unsewered areas or partly sewerred areas there is comparatively little information in these respects, but what there is goes to show that little is being done in the conversion of privies to earth closets.

District.	Number of			Conversion during the year of privies to	
	Water-closets.	Earth-closets.	Privies.	Water-closets.	Earth-closets.
Stitcham Rural	—	—	—	—	133
Whitchurch Stretton Rural ..	116	59	790	0	0
Shropshire Rural—large villages ..	19	40	202	—	—
Wawley Urban	85	67	1156	16	3
Newport Rural	39	90	1060	—	20
Whitchurch Rural	10	76	423	—	—

In many of the rural districts the conversion of insanitary privies to earth closets is urged.

The possibility of transmission of faecal matter from the privy to food in the house by means of flies has been so conclusively demonstrated that privies even in very isolated houses must be looked upon as absolutely unsatisfactory. A great effort should be made to get all privies converted to some kind of earth closet or water closet. The essential part of the management of an earth closet is that excreta shall be immediately covered with dry earth, garden mould being the most suitable. By this means not only is putrefaction stopped, but flies are prevented from gaining access to the excreta and consequently from carrying it to food.

The following extracts from the district reports bear upon excrement disposal :—

Bishop's Castle.—Forty-seven of the 219 water-closets are hand flushed.

Cleobury Mortimer Rural.—*New Cottages at Highley*.—"The closets here are pail type, and it is left to the tenants to dispose of the excrement and ashes. This has resulted in a very serious condition, they are either neglected or the contents of the pails is buried in the yard which is not paved.

"A regular system of scavenging is required here, and if the Company do not do it as they promised, the duty devolves on the Council. A contract should be made with some local haulier to do the work at regular intervals. Otherwise a serious epidemic is certain to occur in the near future."

Clun Rural.—"I have often referred to the existence of a few privies in the district discharging direct into running streams. I am very glad to note that these were abolished during last year, earth closets being substituted."

Ellesmere Urban.—"All the larger houses are provided with flush-out water closets. The remainder are provided with pan closets of a good type, but have no water laid on for flushing purposes. This is a serious defect. The pans in very many cases are allowed to become very dirty, the drains are apt to become choked with paper, and the closets are not flushed out by hand regularly. There is here, a distinct menace to the public health. The remedy is obvious and ought to be applied as soon as possible. No conversions of privies to water closets have been made during the year."

Wenlock Urban.—"Certainly privies of old and objectionable type are in a very large majority, and as I have pointed out in previous reports no general action for their abolition has been possible in the absence of suitable sewerage facilities. No privies were converted to water-closets during the year. Seventy-three notices were served for repair or amendment of closets. "Drained privies" of very obnoxious character, are not infrequently met with. Being untrapped and unflushed the drains become very foul and freely ventilate most offensive gases through the closet seats."

Whitchurch Urban.—"The number now remaining in the town is comparatively small, and the Council should press on their extinction as rapidly as possible."
The scavenging of privies is effected by householders.

SEWERAGE AND DRAINAGE AND SEWAGE DISPOSAL.

The following quotations or condensed extracts from the reports deal with important works that have been carried out during the year, or with insanitary conditions that need remedying :—

Atcham.—The Pontesbury scheme is now completed. "About 40 houses have already been connected with the sewers, and when all have been connected the system will be entirely separate; the old sewers taking road water only."

Bishop's Castle.—A scheme of sewerage and sewage disposal was carried out in 1910. "Good work has been done in re-modelling old drains, over 100 house drains having been relaid and connected to the new sewers during the past three years, under the Inspector's notices and supervision. There is still a good deal of work of this kind to be done, and a steady system of improvement should be encouraged, and where necessary, enforced."

Church Stretton Rural.—*All Stretton.*—"I have reported previously on the drainage of this village. The exceptional feature here is the discharge of the main drain of a considerable private asylum having a number of water closets directly into the brook, causing serious pollution. The Council has endeavoured to obtain the removal of this pollution by voluntary action by the owner, but without result. Under continued pressure by the County Council as to the stream pollution the Council in 1911 engaged a firm of engineers to survey and report as to a scheme of sewerage for this village. This report was received and the estimated cost of a scheme, without purchase of necessary land, was some £1,400. The Council has had the question under consideration throughout the year, but no further steps have been taken, the Council being again in communication with the owner of the Asylum."

"The sewage works of the Church Stretton Urban District Council are situated in the Rural District below Little Stretton. The effluent from the filter beds and land, and storm water tanks, discharges into the brook. No complaint was received during the year as to nuisance from the effluent."

Cleobury Mortimer Rural.—"The drainage from the new cottages at Highley is dealt with by means of a tank for sedimentation and a filter bed and then passed into the river."

Drayton Rural.—"The sewage of Market Drayton is still untreated, and continues to pollute the river at the old outfall. A scheme for sewerage and sewage treatment will now have to be undertaken by the new Urban District Council. The scheme for draining and treatment of the sewage of a portion of the village of Hinstock will be completed as soon as the land for the tanks and filters have been acquired. In October I inspected the sewers and the means of disposal of the sewage in Cheswardine village, and a special report was sent to the Local Government Board, and to the County Council. The Sanitary Inspector is preparing plans for new sewers and for the scientific treatment of the sewage at the outfall."

Ellesmere Rural.—"A new sewage scheme has been adopted for Baschurch, but a difficulty has arisen with regard to the acquisition of the necessary land. A Committee of the Council has the matter under consideration, and action will be taken as early as possible under the circumstances."

Oakengates Urban.—"Three thousand yards of sewers were laid in 1913, and the completion of the work now being carried out will be of great benefit in making the conversion of a large number of privies possible."

"The treatment of sewage will be much facilitated by the underdraining and the additional carriers which are part of the new scheme."

Shifnal Rural.—"At Albrighton, the new sewage works are nearly completed, and the connections will shortly be made; this will make possible much improvement in drainage and conversion of privies, which has been held back for the new sewer."

Wenlock Borough.—A drainage scheme was carried out for the town of Much Wenlock in 1912, and marks a decided improvement in the sanitation of the town. "The Sanitary Inspector reports that 185 branches were brought up to the boundaries of properties and disconnecting traps fixed. Sixty-six private drains have been connected, and in cases where the existing drains were not satisfactory temporary connections were made, pending the reconstruction of the drains, which work has now been taken in hand."

"The sewers of the various other towns in the Borough are for the most part of old construction, and appear to be, generally speaking, drains laid originally to take surface water, or as in the case of the steep hillsides of Ironbridge especially, culverted water-courses. There are at present no works of sewage treatment, the outfall of most of the main sewers being either directly into the Severn, or into streams which fall into the Severn within the district. The sewers being old, no flushing arrangements are provided, other than by surface water, and ventilation depends upon surface water openings, which are not as a rule trapped, and upon the fact that many sewers are culverted in short lengths and in other parts run into open half culvert channels.

"As regards the towns and townships of Ironbridge, Madeley, Coalbrookdale, Coalport, Broseley and Jackfield, I have stated my definite opinion that further necessary progress in sanitation depends upon proper sewerage being provided. The Local Government Board and the County Council have been pressing the Sanitary Committees concerned to obtain engineering assistance "with a view to ascertaining to what extent the present unsatisfactory condition of the sewerage in these two wards could be remedied at a reasonable cost. The Broseley Sanitary Committee obtained engineering assistance and a report during the year."

"In my opinion the sewers require to be largely replaced or re-modelled, and extended, in order to provide efficient drainage for the requirements of the district, independently of any question of river pollution."

The majority of the considerable centres of population have now dealt with their sewage in fairly satisfactory manner. The towns and villages still undealt with and receiving the attention of the County Council are Bridgnorth, Broseley and Madeley, Ellesmere, Market Drayton, All Stretton, Clun, Highley and Baschurch. The position as regards Bridgnorth, Broseley and Madeley, and Clun, has been somewhat altered by the Eighth Report of the Royal Commission on Sewage Disposal.

It is extremely important that the Local Government Board should consider the Eighth Report of the Royal Commission on Sewage Disposal report promptly and announce without undue delay the course of action they intend to adopt.

It is probable that some relief might be given to Local Authorities under certain conditions without any material harm, but it will require most careful legislation, if the purification of rivers is not to receive a severe set back.

There is another aspect of the question that must not be overlooked. The powers under the Rivers Pollution Prevention Act have effected an enormous improvement in the sanitary conditions of districts irrespective of the removal of river pollution, by bringing about the proper sewerage and draining of towns. Many instances of this kind could be quoted in this County, and one or two still remain to be dealt with. Of these the most glaring are the various townships in the Broseley and Madeley Wards of the Borough of Wenlock.

In the District Medical Officer's opinion further sanitary progress in these wards depends upon proper sewerage being provided.

SCAVENGING AND DISPOSAL OF HOUSE REFUSE.

The essentials for a town are :—

(1) Regular and frequent collection by the Sanitary Authorities. Speaking broadly the collection should be at least weekly.

(2) The provision of a covered movable receptacle should be aimed at.

(3) The collection should be carried out in such a way, that little dust escapes into the air.

For this purpose, it is most desirable that the receptacles should be emptied directly into covered carts.

(4) The disposal of the refuse either by burning or by tips away from buildings. If tips are used, the refuse should be quickly covered with earth.

It is most important that householders should be instructed to burn so far as possible all decomposable refuse.

For country districts where the householder has sufficient land to deal with the house refuse, the problem consists of instructing the householder as to the proper methods of disposal, and seeing that no objectionable accumulations are allowed.

The methods of disposal of house refuse in the urban districts is as follows :—

Bishop's Castle.—weekly collection by the Council—the fixed ashpits have been abolished ; 300 buckets or boxes and 20 galvanised iron bins ; carted to a tip outside the town (one isolated house 100 yards away).

Bridgnorth.—by the Council “ monthly, weekly or more often if desired ”—to a tip outside the town—kind of receptacles not stated.

Church Stretton—weekly collection by the Council to a tip outside the town ; 290 of the houses have galvanised iron portable bins, 26 other movable receptacles and 3 fixed ashpits. Collected in open carts ; closed carts under consideration.

Dawley—no public scavenging—the Council removes house refuse at cost price on application—refuse tipped at shoots provided by the Council.

Ellesmere—no public scavenging.

Ludlow—collection by the Council—frequency not stated. Progress is being made in abolishing ashpits. A large proportion of houses have uncovered movable receptacles ; refuse deposited at a tip outside the town ; free from nuisance. A covered scavenging cart is recommended.

Newport—The scavenging of privies and removal of house refuse is undertaken by the Council. A very small number of ashpits remain in use, otherwise an ashbin system with weekly removal is uniform.

Oakengates—collection by the Council to tips ; about 400 movable receptacles, the remainder being fixed ; weekly collection from movable receptacles ; the fixed receptacles emptied on the average about four to five times a year. Abolition of privy pits is recommended.

Oswestry—a daily collection by the Council to tips.

Shrewsbury—a weekly collection by the Council to three tips. The collection calls for much improvement. The provision of covered carts, the prohibition of the deposition of refuse on roadways, and the provision of destructors are recommended.

Wellington—collection by the Council—frequency not stated ; abolition of ashpits very slow ; destructor recommended.

Wem Urban—collection by the Council—frequency not stated.

Wenlock—In Madeley collected by the Council through contractors ; weekly for removable bins—fixed receptacles on request ; in Broseley scavenging of about a dozen public ashpits ; elsewhere there is no public scavenging. The refuse is tipped on waste ground. The storage of refuse is mostly in fixed ashpits.

Whitchurch—weekly collection in the sewered area by the Council. With 14 exceptions all ashpits have been replaced by movable bins. There are 457 covered galvanised iron bins and 723 uncovered receptacles.

MILK SUPPLY, AND INSPECTION OF DAIRIES, COWSHEDS, MILKSHOPS. AND DAIRY CATTLE.

The following Table, compiled from the District Medical Officers' Reports, shows the amount of inspection in each district:—

	Number of Cowkeepers and Milk-sellers on Register.	Number of Premises.			Number of Inspections.	DEFECTS FOUND.											Number of Notices, verbal or written.	Number of these Notices complied with.	Number of defects found and not yet remedied.
		Cowsheds.	Dairies.	Milkshops.		In Cowsheds.						In surroundings of Cowsheds.	In sanitary condition of drains.	In sanitary condition of Milkshops.	In Water Supply.				
						Floor or Cubic Space.	Ventilation.	Lighting.	Structure of Floor.	Drainage.	Cleanliness.								
URBAN DISTRICTS.																			
Bishop's Castle	9	8	1	..	20	..	..	..	1	..	..	..	..	..	..	1	1	..	
Bridgnorth	42	24	17	..	90	..	..	2	1	1	1	1	..	..	2	4	2	2	
Church Stretton .. .	6	1	..	..	4	..	..	..	..	..	1	..	..	..	..	1	1	..	
Dawley	26	25	25	1	38	..	..	..	..	..	14	..	..	..	..	14	14	..	
Ellesmere	8	7	..	1	16	..	..	..	..	..	..	..	..	..	..	6	6	..	
Ludlow	4	..	..	4	8	..	..	..	..	..	..	..	..	1	..	1	1	..	
Newport	27	10	3	2	96	..	2	1	..	1	3	4	..	..	..	11	11	..	
Oakengates	35	22	9	..	88	3	4	2	5	6	4	10	4	..	1	8	6	2	
Oswestry.. .. .	25	11	4		60	..	..	1	..	2	7	2	..	..	..	12	12	..	
Shrewsbury	35	19	..	16	102	..	..	..	..	..	..	..	..	..	..	11	7	..	
Wellington	21	10	1	3	33	..	..	..	..	..	11	2	..	..	..	13	13	..	
Wem	14	11	11	..	66	3	3	..	..	2	10	3	3	..	..	10	10	..	
Wenlock	39	36	39	3	28	..	1	1	2	2	3	1	1	..	1	5	5	..	
Whitchurch	22	18	18	4	72	1	2	4	3	3	3	..	3	..	1	8	6	..	
RURAL DISTRICTS.																			
Atcham	214	214	10	..	397	..	17	17	23	23	52	20	10	..	3	69	63	..	
Bridgnorth	19	19	..	..	40	..	1	..	1	..	6	6	..	..	..	6	6	..	
Burford	2	2	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	
Chirbury	23	23	..	..	54	..	..	1	1	1	6	..	..	..	..	9	9	..	
Church Stretton .. .	14	16	11	..	104	12	2	12	3	12	9	3	12	..	..	13	13	..	
Cleobury Mortimer ..	7	7	7	..	28	..	..	..	..	..	..	1	..	..	..	..	..	..	
Clun	6	6	6	..	18	..	..	1	1	..	2	..	1	..	..	5	5	..	
Drayton	116	..	116	..	65	..	..	..	..	..	..	..	..	..	..	19	19	..	
Ellesmere	55	55	..	..	110	..	..	..	..	..	20	..	..	..	..	20	20	..	
Ludlow	26	26	..	..	50	..	..	..	1	1	1	..	1	..	..	26	26	..	
Newport	40	38	16	..	114	..	1	1	1	..	78	..	..	..	..	79	78	..	
Oswestry.. .. .	73	72	..	1	150	1	3	..	1	2	7	5	2	..	1	22	20	..	
Shifnal	42	40	36	2	232	..	..	..	..	..	5	..	..	..	..	5	5	..	
Teme	1	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	
Wellington	36	..	36		53	..	..	..	..	1	..	..	..	..	..	1	..	..	
Wem	125	125	..	..	206	..	..	..	..	6	12	..	..	..	..	18	18	..	
Whitchurch	26	26	26	..	55	..	..	..	..	..	8	..	..	..	..	30	28	..	

The following are extracts from the Medical Officers of Health's Reports :—

Atcham.—" In any case the supervision of the milk trade in the District has been greatly increased in recent years, the number on the register having been increased from 84 in 1906, and in connection with this much good work has been done in obtaining better structural conditions in the cowsheds ; lighting, ventilation, flooring, and drainage being brought up to a better standard."

Bridgnorth Rural.—" Nineteen cowkeepers and milksellers are at present on the register. Their premises have all been regularly inspected and are in a fairly sanitary condition. In some instances more attention should be paid to the cleansing of floors, the white-washing of walls, and the removal of manure, which in many instances is placed too close to the cowsheds."

Chirbury.—" Dairies are very well kept, and I have been pleased to see that more attention is being paid to the cleanliness and ventilation of cowsheds."

Church Stretton Rural.—" The defects found were principally as to paving, lighting, and drainage, want of cleanliness in the sheds, foldyards and approaches. The Council decided to wait for the passage of the Milk Bill before adopting regulations. Existing defects were pointed out to the cowkeepers, but very few structural defects have been remedied so far."

Drayton Rural.—" The whole of the dairies, cowsheds and milkshops in the district were systematically inspected in 1910—11, and special reports sent to the Local Government Board and the County Council. A note of the defective conditions found was sent to each occupier and a good many improvements have resulted. Much more remains to be done in the way of structural alterations, and for the increase of lighting and ventilation. There are 116 cowkeepers and milksellers on the register, and the Sanitary Inspector is making a detailed inspection."

Ellesmere Rural.—" The dairies, cowsheds and milkshops are clean and sanitary, and the conditions of milk supply are good."

Ludlow Urban.—" The Council pay for the veterinary examination of the cows on these farms at regular intervals. The sheds are kept in a sanitary condition, only one notice being required during the year."

Oakengates Urban.—"Cowsheds, Dairies and Milkshops."—" Several improvements have been carried out in a number of sheds during the year, and one only now requires to be dealt with. The structural condition of the sheds may now be regarded as satisfactory."

Oswestry Urban.—" Our Veterinary Inspector visits and reports every six months on the health of the cows whose milk is brought into the Borough."

Oswestry Rural.—" The cowkeepers and milksellers on the register keep their premises clean, and observe certain precautions to ensure a healthy supply."

Shrewsbury Urban.—" During the year 13 samples of milk were taken for examination for the presence of tubercle bacilli. One of the samples examined was found to contain tubercle bacilli. Information was given to the County Medical Officer with respect to this milk, which came from outside the district."

" All the 13 samples of milk were also examined for dirt by the sedimentation process, and one out of the 13 showed an excess of dirt."

Wenlock Urban.—" The Inspector has paid special attention to the registration and improvement of these places since the regulations were adopted."

The following districts in the County have not yet adopted the Dairies and Cowsheds Regulations :—

Burford, Church Stretton Rural, Cleobury Mortimer, Ellesmere Urban and Rural, Teme and Wem Urban.

The delay in passing the Milk and Dairies Bill is undoubtedly acting injuriously, not only by keeping back powers that are urgently needed, but also by providing an excuse to some authorities for making no further progress.

In order to prevent the sale of tuberculous milk and in order to get the cowsheds into a reasonably sanitary condition, some such powers as those contained in the Milk and Dairies Bill are absolutely essential. For the prevention of the sale of tuberculous milk systematic inspection of dairy cattle is the first step.

In the meantime a scheme has been put into operation for the examination by the County Health Department of samples of milk from all parts of the County, for dirt.

A report on each sample is made to the Medical Officer of Health and Sanitary Inspector of the district. It is left for the district sanitary official to warn the milkseller in the first instance, but in the event of the milk showing no improvement it is intended to take samples under the Food and Drugs Act for prosecution.

It is confidently anticipated that this procedure will have a marked effect upon the cleanliness of the methods of collection and distribution of milk.

So far, these facilities for examination have not been used so freely as was expected. A sample bottle for transmission through the post has been sent on application.

In 1913, three samples from Ellesmere Urban District were received. Of these 2 were dirty and one very dirty.

Since the beginning of 1914, 17 samples have been received.

Tuberculosis Order, 1913.—The following is a statement of the action taken by the County Council under this Order :—

No. of animals inspected.	DESCRIPTION	Tuberculosis of the Udder.	Giving Tuberculous milk.	Tuberculosis with Emaciation.	Conclusions from Post Mortem Examination.				
					A. Tuberculosis of the Udder.	B. Giving Tuberculous milk.	C. Tuberculosis with Emaciation.	D. Affected but not as in columns A, B, or C.	E. Not affected.
387	Cows in milk	6	..	41	6	..	31	4	4
106	Other cows or heifers ..	3	..	21	3	..	20	2	3
119	Other bovine animals ..	.	..	4	..	..	2	..	..
612	Totals	9	..	66	9	..	53	6	7

It will be noticed that as a result, six cows in milk and three other cows were slaughtered on account of tuberculosis of the udder. These are the really dangerous animals to human beings. In addition, 53 animals were slaughtered on account of tuberculosis with emaciation. These animals were no doubt mostly suffering from advanced tuberculosis, and it is this class of animal that is principally responsible for the spread of tuberculosis amongst cattle.

MEAT INSPECTION.

Very little information is given in most of the reports with respect to meat inspection. In 8 urban and 3 rural districts it is stated that the slaughter-houses are visited at times of slaughtering. In the remaining districts, although it is not definitely stated in all, it is fairly safe to presume that the slaughter-houses are only visited with respect to their sanitary condition.

In *Newport Urban District*.—"The Sanitary Inspector pays frequent and regular visits (to the slaughter houses) and since his appointment has given very close and careful attention to meat inspection, and has put the control of the meat trade upon a much more satisfactory footing. He visits the slaughter-houses at the ascertained time of slaughter, for inspection of the meat. As regards tuberculous meat, he reports that tuberculous carcasses, or parts, were found in 18 cases. Sixteen carcasses or parts were examined at the invitation of the butchers and found unsound for other reasons. Affected carcasses or parts were surrendered or destroyed. The Council has engaged as consultant expert, Mr. W. T. Wilson, M.R.C.V.S., of the Harper-Adams Agricultural College."

In *Oakengates*.—"Such inspection of meat as is possible is carried out; the slaughter-houses are visited when killing is taking place, and the meat at the market on Saturday night carefully watched."

In *Shifnal*.—"The slaughter-houses are constantly visited and the carcasses exposed for sale carefully examined, and in other ways a serious attempt is made to prevent the consumption of unsound meat in the district. Three beasts and 14 sheep were condemned during the year."

The results of meat inspection in Shrewsbury are summarised on page 115.

Apart from tuberculosis, the most dangerous class of meat is that derived from animals that have died (or slaughtered shortly before death) from acute septic diseases.

The Anthrax Order, 1910, as now administered, is probably a considerable safeguard against the sale of this class of meat, and probably it can be made more effective in this direction.

During the year 1913, 284 suspected animals were reported, and 17 of these were diagnosed as anthrax; in 1912 the numbers were 355 and 24, and in 1911 the numbers were 361 and 24.

When a suspected case is notified to the police, a veterinary inspector is at once called in, and he certifies either that the case is not anthrax, or that it is a suspected case of anthrax. In the latter event the carcass is cremated at once. In the former, the carcass is detained until the veterinary inspector's diagnosis is confirmed by the Chief Veterinary Officer of the County, after microscopical examination of the blood.

I have pointed out on previous occasions the importance of giving the sanitary authorities information with regard to these carcasses that are certified as not affected with anthrax, and which the police consequently do not see destroyed. It is probable that the use of one of these carcasses as food is rare, but such a contingency should be rendered impossible.

INSPECTION.

The work of sanitary inspection in the various districts is summarised on Table VIII. The number of inspections given in Column 1 comprise all houses *inspected*, including those inspected under the Housing and Town Planning Act, but not houses that are visited for another purpose without an inspection of the premises being made. It is impossible to state in tabular form the quality of the inspection, and it is probable that returns made are not quite comparable. There are, however, certain outstanding facts that are quite evident.

In the following districts less than ten per cent. of the houses were inspected, and this amount of inspection must be considered quite inadequate :—

Rural Districts—

Ludlow	3.4
Cleobury Mortimer ..	6.8
Wellington	6.8

Urban Districts—

Oakengates.. ..	2.8
Ellesmere	3.3

In the following districts more than 20 per cent. of the houses were inspected :—

Urban.—Bridgnorth, Shrewsbury, Wem, Church Stretton, Bishop's Castle, Oswestry, Wenlock, Wellington, Newport, Whitchurch. *Rural.*—Wem, Bridgnorth, Shifnal, Burford, Chirbury, Oswestry, Whitchurch.

In the remaining districts the houses inspected were between 10 and 20 per cent. of the whole.

It is evident from the great variation in the number of defects found in different districts that there is a difference in the method of selection of the houses for inspection and in the thoroughness of the inspection. Speaking generally the inspection of less than 20 per cent. of the houses of a district cannot be considered as adequate.

FACTORIES AND WORKSHOPS.

Details of the inspection of factories and workshops are given on Table X., and summaries of the remarks of the medical officers will be found in Part II. of the report.

The amount of inspection in many districts is about one visit a year to each workshop, and in some districts it falls short of this. Such an amount of inspection cannot be considered adequate for the purpose of seeing that the workshops are kept clean, well-ventilated, and in other respects in a sanitary condition.

Very few lists of out-workers have been received. The amount of work carried on in workshops throughout the County is small, and this no doubt accounts to a great extent for the comparatively little attention that appears to be given in most of the districts to this matter.

TABLE X.
FACTORY AND WORKSHOP ACT, 1901.
SUMMARY FOR 1913.

URBAN DISTRICTS.	Number of Workshops on Register.	Number of Inspections of Factories, Workshops, Workplaces, and Home-workers' Premises.	Written Notices sent.	Defects from					Other Defects.	Defects remedied.	Failure to fix Abstract of Act.	Representations from H.M. Inspector.	Number of Underground Bakehouses.	Lists of Outworkers received.	Number of Outworkers in District approximate.	REMARKS.	RURAL DISTRICTS.	Number of Workshops on Register.	Number of Inspections of Factories, Workshops, Workplaces, and Home workers' Premise-.	Written Notices sent.	Defects from					Other Defects.	Defects remedied.	Failure to fix Abstract of Act.	Representations from H.M. Inspector.	Number of Underground Bakehouses.	Lists of Outworkers received.	Number of Outworkers in District approximate.	REMARKS.
				Want of Cleanliness.	Want of Ventilation.	Overcrowding.	Defective Sanitary Accommodation.	Breach of Sanitary Require-ments of Bakehouses.													Want of Cleanliness.	Want of Ventilation.	Overcrowding.	Defective Sanitary Accommodation.	Breach of Sanitary Require-ments of Bakehouses.								
BISHOP'S CASTLE ..	25	42	..	..	..	..	..	..	..	..	..	..	..	..	..		ATCHAM ..	90	121	..	18	..	..	..	..	10	28	..	..	..	..	..	
BRIDGNORTH ..	79	480	..	..	..	..	..	..	..	..	..	..	1	..	..		BRIDGNORTH ..	13	15	..	..	..	..	..	..	..	..	..	..	..	..	..	
CHURCH STRETTON ..	28	79	5	4	..	..	1	..	..	5	..	..	..	..	..		BURFORD ..	6	2	..	..	..	..	..	..	..	..	..	..	..	..	..	
DAWLEY ..	39	48	6	4	1	..	..	5	..	10	..	..	..	2	..		CHIRBURY ..	†	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
ELLESMERE ..	34	12	1	..	..	..	..	..	..	..	..	..	2	..	..		CHURCH STRETTON ..	30	88	..	..	..	1	..	..	1	..	..	..	..	..	..	
LUDLOW ..	51	62	20	9	1	..	10	..	..	20	..	..	..	..	..		CLEOBURY MORTIMER ..	25	25	..	2	..	..	..	..	2	..	..	..	..	..	..	
NEWPORT ..	111	115	..	7	..	..	..	..	..	7	..	..	..	..	..		CLUN ..	75	88	..	4	..	..	..	..	4	..	..	..	..	..	..	
OAKENGATES ..	85	*	..	..	..	2	..	..	..	2	..	2	..	..	..		DRAYTON ..	100	88	3	3	1	..	..	..	1	5	..	..	..	..	..	
OSWESTRY ..	100	100	25	15	5	2	..	..	3	22	..	..	..	..	..		ELLESMERE ..	49	98	1	..	..	..	..	..	1	1	..	..	..	..	..	
SHREWSBURY ..	236	482	31	13	2	1	12	..	7	33	..	..	..	..	..		LUDLOW ..	44	44	..	..	..	..	..	..	..	..	..	..	..	..	..	
WELLINGTON ..	45	78	7	4	..	2	1	..	..	7	..	..	..	2	22		NEWPORT ..	16	34	..	..	..	..	..	..	..	..	..	..	..	..	..	
WEM ..	71	284	0	5	..	..	..	..	1	6	..	..	..	..	..		OSWESTRY ..	85	126	4	3	..	..	..	..	3	..	..	..	..	..	..	
WENLOCK ..	140	58	5	3	..	..	..	..	3	6	1	2	1	..	..		SHIFNAL ..	62	173	4	3	..	..	2	..	5	..	..	..	..	..	..	
WHITCHURCH ..	76	188	..	3	..	..	4	..	..	7	..	..	..	..	..		TEME ..	13	14	..	..	..	..	..	..	..	..	..	..	..	..	..	
																	WELLINGTON ..	37	27	..	..	..	..	..	..	..	..	..	..	..	..	..	
																	WEM ..	68	68	3	..	3	..	..	..	3	..	..	..	..	..	..	
																	WHITCHURCH	9	38	9	9	..	..	..	..	9	..	..	..	..	..	..	

* Inspected regularly.

† No details—inspected and found satisfactory.

FOOD AND DRUGS.

RETURN OF THE NUMBER OF SAMPLES TAKEN BY MEMBERS OF THE SHROPSHIRE CONSTABULARY
FOR ANALYSIS UNDER THE FOOD AND DRUGS ACT, DURING 1913.

Nature of Sample.	No. taken.	Result.		Remarks.
		Genuine.	Adulterated.	
Milk ..	82	73	9	1 fined £2 and Costs 19s. 6d. ; 1 fined 10s. and Costs 18s. 6d. ; 1 to pay Costs 6s. 6d. ; 1 to pay Costs £1 10s. ; 1 to pay Costs £2 17s. ; 1 dismissed with a caution. 2 Fat slightly below standard ; 1 Fined £5 and costs 24/-.
Preserved				
Cream ..	9	9	—	
Butter ..	27	21	6	All contained slight traces of Boric Acid.
Cheese ..	2	2	—	
Lard ..	16	16	—	
Arrowroot ..	4	4	—	
Corn Flour ..	1	1	—	
Oatmeal ..	10	10	—	
Sugar ..	2	2	—	
Sausages ..	6	6	—	
Salmon ..	1	1	—	
Jam ..	1	1	—	
Marmalade ..	1	1	—	
Ground Rice ..	1	1	—	
Crushed				
Linseed ..	1	1	—	
Cayenne ..	2	2	—	
Ginger ..	6	6	—	
Mustard ..	6	6	—	
Pepper ..	9	9	—	
Vinegar ..	2	2	—	
Coffee ..	9	9	—	
Brandy ..	4	3	1	Slightly below standard.
Gin ..	7	7	—	
Rum ..	3	3	—	
Whiskey ..	16	15	1	Fined £1 10s. and Costs 18s. 6d.
	228	211	17	

A considerably larger number of samples of milk and a smaller number of alcoholic drinks were taken than in previous years. Owing to an oversight no samples of drugs were taken. The desirability of more extensive sampling of drugs in consequence of the operation of the National Insurance Act is worth considering. This should not, however, entail a smaller number of food samples.

The details of analysis of milk samples are of interest and are given separately.

RESULTS OF ANALYSIS OF ALL SAMPLES OF MILK SUBMITTED.

Fat.	Solids not fat.	Preservative.	Remarks.	Fat.	Solids not fat.	Preservative.	Remarks.
Per- centage.	Per- centage.			Per- centage.	Per- centage.		
3.1	9.1	None		2.81	8.73	None.	6.3 per cent. deficient in fat.
3.5	8.9	"		4.1	8.9	"	
3.4	9.0	"		3.51	8.57	"	
3.7	9.0	"		3.38	9.08	"	
2.52	8.48	"	16 per cent. deficient in fat.	3.33	8.89	"	
3.18	7.92	"	6.5 per cent. added water.	3.6	8.54	"	
3.7	8.8	"		3.57	8.75	"	
3.95	8.85	"		4.0	9.04	"	
3.8	9.5	"		2.71	8.29	"	9.6 per cent. deficient in fat.
3.5	8.95	"		3.6	9.0	"	
3.47	8.55	"		3.7	9.1	"	
2.98	9.34	"		3.5	8.59	"	
2.93	8.47	"		3.8	9.1	"	
3.8	9.15	"		4.57	9.39	"	
1.44	8.9	"	52 per cent. deficient in fat.	3.94	8.86	"	
3.6	9.0	"		9.38	8.54	"	
2.9	8.9	"		3.45	8.96	"	
3.7	9.0	"		4.1	8.44	"	
3.55	8.5	"		3.73	8.89	"	
2.52	7.22	"	15 per cent. added water.	4.2	9.0	"	
4.0	8.85	"		3.9	8.5	"	
3.6	9.1	"		1.45	2.85	"	67 per cent. added water.
3.35	9.05	"		3.35	8.95	"	
3.05	9.1	"		3.6	8.95	"	
3.2	8.95	"		3.19	8.93	"	
3.95	9.15	"		3.55	8.98	"	
3.2	8.92	"		4.26	8.68	"	
3.4	9.0	"		4.71	9.01	"	
4.16	8.78	"		4.1	8.84	"	
4.32	8.7	"		4.31	8.77	"	
3.0	8.84	"		3.9	9.06	"	
4.2	8.8	"		4.39	8.71	"	
3.3	8.65	"		3.73	9.25	"	
3.2	8.6	"		4.1	9.06	"	
4.13	8.35	"		4.04	9.1	"	
2.91	8.75	"		4.42	9.38	"	
2.92	8.66	"		3.35	8.97	"	
3.5	8.9	"		4.2	9.0	"	
3.8	8.92	"		3.39	8.65	"	
3.4	8.8	"		3.4	8.45	"	
				3.39	8.65	"	

It will be observed that the average amount of fat in all the samples taken was 3.62, or well above the minimum prescribed. No less than 24 per cent. of the samples contained 4 per cent. or more of milk fat.

One sample of milk contained the extraordinary percentage of 9.38 of fat.

REPORT OF ADMINISTRATION IN CONNECTION WITH THE PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912, IN THE COUNTY OF SALOP, FOR THE YEAR ENDED DECEMBER 31ST, 1913.

—Milk ; and Cream not sold as Preserved Cream.

	Number of samples examined for the presence of a preservative.	Number in which a preservative was reported to be present.
Milk	29	none.
Cream	none.	none.

—Cream sold as Preserved Cream.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct.

(i) Correct statements made	9
(ii) Statements incorrect	0

Total 9

(b) Determinations made of milk fat in cream sold as preserved cream.

(i) Above 35 per cent.	9
(ii) Below 35 per cent.	0

Total 9

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso in Article V. (2) of the Regulations have not been observed.

Nil.

—Thickening Substances. Any evidence of their addition to cream or to preserved cream.

Nil.

—Other observations.

One sample contained a small quantity of cane sugar.

MIDWIVES ACT.

The following statement shows the number of midwives, the visits paid and notifications received in each year since 1905 :—

Year.	Number of Midwives practising in the County in June of each year.	Number of Visits paid.	Notifications of having sent for medical help.	Notifications of still-births.		Notifications of death of mother or child with no medical man in attendance.
				By Midwives	By Parish Clerks.	
1905	231	642	83	38	—	5
1906	345	829	325	105	—	13
1907	328	837	385	95	227	16
1908	310	868	504	91	220	13
1909	309	885	533	111	195	9
1910	321	711	516	90	166	8
1911	293	840	515	81	154	23
1912	284	770	555	86	170	16
1913	275	743	496	94	140	10

The Inspector has taken the opportunity, whenever possible, of visiting the midwives at their work, as in this way only is it really possible to see that many of the rules of the Central Midwives Board are properly carried out, and that the midwife attends to the patient satisfactorily.

The Inspector at her visits not only satisfies herself with regard to the condition of the bag, appliances, dresses and aprons, the keeping of the register and records, but she gives instructions to the midwives whenever necessary, on the essential matters concerning their practice.

Since it was made obligatory (Rule 13) for midwives to take and record the pulse and temperature, very special attention has been paid to this matter. Of the midwives on the roll, 50 are reported as unable to keep records and incapable of being taught. Some of these are really only practising as monthly nurses and as such are not required to keep records ; and a few others can take the temperature but cannot record it. The remainder are taking and recording the pulse and temperature. These records are becoming more correct each year. They are of an educational value and enable the Inspector to direct her teaching with better effect.

On the whole, the Inspector speaks very highly of the praiseworthy efforts of the midwives to carry out the provisions of the Act, under conditions that are often very adverse. There is, however, not sufficient attempt made to understand and remember the rules, and this necessitates fresh explanations at almost every visit. It is mostly in consequence of this, that there are so many small breaches of the rules to which attention has been called. The Inspector reports that the trained midwives are quite as negligent in this respect as the untrained ones. It is evident that a knowledge of the rules and their importance is not sufficiently insisted upon during training.

The proper feeding of infants is made a subject of personal instruction, and leaflets drawn up for this purpose are given to the midwives for them to leave with and explain to the mothers. It is satisfactory to find that a very large proportion of the children in the County are breast-fed, the actual percentage so fed, of 3,769 births, that we have information of, being 85 per cent.* The midwives are instructed that under no circumstances must they recommend hand-feeding, and that, if for any physical reason, breast-feeding is thought to be impossible, the case is one for medical advice. The Inspector reports that the midwives, generally speaking, take a very intelligent interest in the feeding of infants, and that they really exert themselves to overcome the mothers' objections to breast-feeding.

In those cases where it has been possible for the Inspector to visit mothers and give advice with regard to infant feeding, it has been most encouraging to observe that the advice has been well received and the results have been good. This work will be undertaken thoroughly and systematically by the health visitors when appointed.

Notifications of sending for Medical Help.—It is obvious that one of the most important duties imposed upon local Supervising Authorities is to see that medical help is sent for in accordance with the rules, and for this purpose it is necessary that all the formalities should be strictly adhered to. Preliminary inquiries are made in each case, and, if necessary, a personal investigation.

* This percentage refers to the number of children breast-fed during the time the midwife is in attendance but other information appears to show that a large proportion remain on the breast for the proper period.

Notifications of Still-births.—In order to obtain an independent return of still-births as a check, the parish clerks and the cemetery authorities have been asked to supply me with particulars of still-born children who are buried in their burial grounds. All the cemetery authorities, with two exceptions, and practically all the parish clerks or the clergy acting for them, have very kindly undertaken to supply me with this information, and my thanks are due to them. The notifications thus received have been a considerable help in carrying out the Act. With the adoption of the Notification of Births Act, notification of still-births will be received directly from the midwife, doctor or parent.

Two hundred and thirty-four notifications of still-births referring to 186 cases have been received from midwives and Parish Clerks and Clerks to Burial Boards.

53	of the cases	were attended	by medical men,	no midwife being in attendance.
94	"	"	"	by certified midwives without medical assistance.
0	"	"	"	by uncertified midwives.
37	"	"	"	by midwives, medical help being obtained.
2	"	"	"	no particulars.

Fifty-three or 28 per cent. of the cases occurred in the practice of medical men, and for 37 or 20 per cent., medical help was obtained. In 48 per cent. of the cases, therefore, a medical man was in attendance.

The returns sent in by the certified midwives, although incomplete, show that they attended 3,769 births in 1913 out of a total of 5,245, leaving less than 1,476 or 28 per cent. to be attended by medical men and uncertified midwives.

Approximately the incidence of still-births was—

3.5 per cent. of the births attended by midwives including those in which the midwife sent for medical assistance.

3.6 per cent. of the births attended by medical men.

Analysis of the notifications of still-births sent in by the midwives shows that :—

49 were at full time ; 38 premature ; in 7 no statement.

The condition of the child pointed to :—

Death during labour or shortly before in 47 ; death some time before labour in 35 ; in 12 there was no indication given.

The presentations were :—head 58, breech 7, footling 5. In 17 cases the presentations were not mentioned, and in 7 cases the child was born before the midwife's arrival.

The sex of the children was as follows :—males 50, females 41 ; sex not mentioned in 3.

An inquiry was made into all still-births, although frequently at some considerable time after the birth. There was no definite evidence that death was due to prolongation of labour in the absence of medical help, and in no case was there evidence that a live birth was returned as a still-birth.

These figures, although incomplete, are of some value in showing the number of children that might possibly have been saved if skilful attendance had been available at the time of confinement. It is particularly in breech presentations (including footling) that skilful and rapid completion of delivery is likely to save life. It seems a pity that the rules of the Central Midwives Board allow a midwife to attend all uncomplicated breech presentations, *especially in primipara*, because when complications arise, it is frequently too late to send for medical help.

The prevention of still-births is a part of the general question of the care of women during pregnancy.

Notifications of deaths of mother or child with no medical man in attendance.—The notifications sent by the police continue to be of great use in bringing to light cases that the midwives should have reported.

Puerperal Fever.—Thirteen cases were reported or discovered, compared with 16 last year. Five of the cases occurred in the practice of medical men, and in these there was no midwife in attendance or the midwife attended as a monthly nurse.

Only ten of these thirteen cases were notified to the Medical Officer of Health as puerperal fever.

The sanitary districts in which more than one case occurred were :—Cleobury Mortimer (3), Dawley (2), Oakengates (2), and Wenlock (2).

The corresponding districts in 1912 were :—Cleobury Mortimer (3), Wellington Urban (3), Ellesmere Rural (3), and Atcham (2).

It will be observed that the largest number of cases occurred each year in the comparatively small rural district of Cleobury Mortimer. This may be due to coincidence or to some factor inherent in the district. One is not in a position to make any definite suggestion.

Present Supply of Midwives.—In June, 1914, there were 260 midwives registered as practising in the County, compared with 275 at a corresponding period in 1913.

As previously pointed out one can only estimate the real supply by considering the age, training, and general capabilities and distribution of the midwives. A fresh estimate, necessarily only approximate, has been made of the number of midwives at the various ages. It is estimated that out of a total of 260, there are 150 over 50 years of age. Of this number, about 62 are over 60, and 27 over 70 years of age.

Of the 260 registered midwives, 110 are properly trained, and the remaining 150 are on the roll because they were in practice twelve months before the passing of the Act. The number of trained midwives on the roll on June 1st, 1914, was eight more than in the previous year. The numbers since 1907 are :—June 1st, 1907, 70 ; 1908, 73 ; 1909, 81 ; 1910, 93 ; 1911, 89 ; 1912, 105 ; 1913, 102 ; 1914, 110.

In the same years the untrained midwives have decreased :—1907, 256 ; 1908, 237 ; 1909, 228 ; 1910, 228 ; 1911, 204 ; 1912, 179 ; 1913, 173 ; 1914, 150.

There is a gradual diminution of untrained midwives and a still slower increase of trained ones. No individual instances of hardship from the absence of midwives have come under notice during the year, but it is evident that in some districts most of the cases must be attended by medical men or by uncertified midwives. The Notification of Births Act will clear up the matter effectually.

MIDWIVES GROUPED ACCORDING TO NUMBER OF CONFINEMENTS THEY ATTENDED IN 1912. (a) TRAINED MIDWIVES.

Number who have	not sent in returns of confinements	..	..	..	..	..	..	..
„	„	attended no confinements	..	..	..	..	..	..
„	„	„	less than 10 confinements	..	..	..	..	3
„	„	„	between 10 and 20 confinements	..	..	..	..	3
„	„	„	„	20 and 30	„	..	..	1
„	„	„	„	30 and 40	„	..	..	..
„	„	„	„	40 and 50	„	..	..	..
„	„	„	„	50 and 60	„	..	..	..
„	„	„	„	60 and 70	„	..	..	..
„	„	„	„	70 and 100	„	..	..	..
„	„	„	„	over 100	„	..	..	..

(b) UNTRAINED MIDWIVES.

Number of Midwives who have not sent in returns of confinements	..	..	..	13
" " " " attended no confinements	..	..	..	16
" " " " " less than 10 confinements	..	..	..	81
" " " " " between 10 and 20 confinements	..	..	..	40
" " " " " " 20 and 30	..	..	..	12
" " " " " " 30 and 50	..	..	..	8
" " " " " " 50 and 70	..	..	..	8
" " " " " " 70 and 100	..	..	..	2
" " " " " " over 100	..	..	..	1

This analysis shows clearly that only a comparatively small number of midwives are making a living by this work. Unless a midwife is attending at least 50 cases a year she must have some other source of income, and applying this test it will be seen that only 17 or a little over 5 per cent. can rely upon midwifery alone.

The following classification of parishes was drawn up four years ago to give as accurate an idea as possible of the supply of midwives throughout the County. It has been altered each year in accordance with our more correct knowledge and with the changes in the distribution of midwives. It may now be considered as nearly accurate as such a classification can be.

UNION.	Parishes fairly well supplied with trained Midwives.	Parishes well supplied with untrained Midwives (many of these are becoming less active and capable of doing the work each year).	Parishes poorly supplied either on account of distance from a Midwife or other cause.	Parishes with practically no supply.
ATCHAM.	I. Church Preen. Minsterley. Habberley. Battlefield. Eaton Constantine. Wroxeter. Uppington. Pontesbury. Berrington. Atcham. Uffington. Withington. Upton Magna. Montford. Shrawardine. Langley. Yockleton. Acton Burnell. Alberbury. Astley. Bicton. Condoover. Cound. Cressage. Fitz. Ford. Frodesley. Pitchford. Preston Gubballs. Stapleton. Sutton. Shrewsbury. Ruckley.	II. Molverley. Meole Brace. Minsterley.	III. Great Hanwood. Kenley. Leighton. Church Pulverbatch.	IV. Albrighton. Hughley. Wollaston. Harley. Shineton. Westbury.
BRIDGNORTH.	Worfield. Linley. Burwarton. Neenton. Cleobury North. Dittcn Priors.	Claverley. Billingsley.	Willey. Bridgnorth.	Oldbury. Eardington. Middleton Scriven. Chelmarsh. Acton Round. Alveley. Astley Abbots. Aston Eyre. Chetton. Deuxhill. Glazeley. Monkhopton. Morville. Quatt Malvern. Romsley. Sidbury. Stanton Long. Tasley. Upton Cressett.
CHURCH STRETTON.	Acton Scott. Little Stretton. Longnor. Church Stretton. Cardington.	All Stretton. Eaton-under-Heywood. Leebotwood. Rushbury.	Hope Bowdler. Wistanstow.	Easthope. Shipton. Sibdon. Smethcott. Woolstaston.

UNION.	Parishes fairly well supplied with trained Midwives.	Parishes well supplied with untrained Midwives (many of these are becoming less active and capable of doing the work each year).	Parishes poorly supplied either on account of distance from a Midwife or other cause.	Parishes with practically no supply.
	I.	II.	III.	IV.
CLEOBURY MORTIMER	Cleobury Mortimer.	Aston Botterell.	Woodhouse.	
"	Coreley.	Farlow.	Hopton Wafers.	
"	Milson.	Loughton.	Stottesdon.	
"	Neen Savage.	Silvington.		
"	Neen Sollars.	Highley.		
"	Wheathill.	Kinlet.		
CLUN.	Clunbury.	Mainstone.	Clungunford.	Hopton Castle.
"	Bishop's Castle	Edgton.		Clun.
"	Urban.	Hopesay.		Wentnor.
"	Bishop's Castle			
"	Rural.			
"	Lyddham.			
"	More.			
"	Norbury.			
"	Shelve.			
"	Lydbury North.			
"	Myndtown.			
"	Ratlinghope.			
DRAYTON.	Hodnet.	Hinstock.		Ercall Parva or
"	Drayton-in-Hales.			Child's Ercall.
"	Moreton Say.			
"	Adderley.			
"	Tittenley.			
"	Stoke-upon-Tern.			
"	Cheswardine.			
"	Norton-in-Hales.			
"	Woore.			
ELLESMERE.	Baschurch.	Ellesmere Rural.		
"	Ellesmere Urban.			
"	Hadnall.			
"	Hordley.			
"	Myddle.			
"	Cockshutt.			
"	Welshampton.			
"	Great Ness.			
"	Little Ness.			
FORDEN.	Chirbury.		Brompton & Rhis-	Worthen.
KNIGHTON.		Llanfair Waterdine.	ton.	
"		Bucknell.		Bettws.
"				Bedstone.
LUDLOW.	Ashford Bowdler.	Abdon.	Cold Weston.	Stowe.
"	Ashford Carbonel.	Halford & Dinchop.	Clee St. Margaret.	Hopton Cangeford.
"	Bromfield.	Heath.	Tugford.	Bitterley.
"	Cainham.	Onibury.	Holdgate.	
"	Diddlebury.		Stoke St. Milborough	
"	East Hamlet.		Culmington.	
"	Hope Bagot.			
"	Ludford.			
"	Munslow.			
"	Stanton Lacy.			
"	Stokesay.			
"	Ludlow.			
MADELEY.	Much Wenlock.	Dawley Magna.	Barrow.	Little Wenlock.
"	Madeley.	Buildwas.	Much Wenlock	
"		Stirchley.	(part of)	
"		Benthall.		
"		Broseley.		
"		Madeley (part of)		
"		Posenhall.		

UNION.	Parishes fairly well supplied with trained Midwives.	Parishes well supplied with untrained Midwives (many of these are becoming less active and capable of doing the work each year).	Parishes poorly supplied either on account of distance from a Midwife or other cause.	Parishes with practically no supply.
	I.	II.	III.	IV.
NEWPORT. " " " " " " " " "	Cherrington. Chetwynd. Chetwynd Aston. Church Aston. Edgmond. Lilleshall. Longford. Newport. Tibberton. Woodcote.	St. George's.		
OSWESTRY INCORPORATION. " " " " " " " "	Ruyton-of-the- Eleven-Towns. Saint Martin's. Selattyn. Weston Rhyn. Oswestry Urban. West Felton. Knockin. Whittington.	Kinnerley. Llanyblodwell. Llanymynech. Oswestry Rural. Syctyn.		
SEISDON. SHIFNAL. " " "	Albrighton. Shifnal. Stockton. Sutton Maddock.	Rudge. Kemberton. Prior's Lee.	Boscobel. Ryton. Beckbury. Badger. Tong.	Boningale. Donington. Sheriffhales.
TENBURY. " " " " "	Boraston and Whatmore. Burford. Greet. Nash, Tilsop, and Weston. Whitton.			
WELLINGTON. " " " " " " "	Bolas Magna. Eyton-upon-the- Wildmoors. Waters Upton. Wellington Urban. Wrockwardine. Kinnersley. High Ercall.	Hadley. Rodington. Wellington Rural. Wombridge. Wrockwardine Wood	Longden-upon-Tern. Preston-upon-the- Wildmoors.	
WEM. " " " " " " " " "	Broughton. Clive. Grinshill. Loppington. Moreton Corbett. Shawbury. Stanton-upon-Hine- Heath. Wem Rural. Wem Urban. Weston. Prees.	Lee Brockhurst. Whixall.		
WHITCHURCH. " "	Ightfield. Whitchurch Urban. Whitchurch Rural.			

Midwives reported to the Local Supervising Authority during the year 1913 :—

ALLEGED OFFENCE.	ACTION TAKEN.
1. Not sending for medical help for a child suffering from dangerous feebleness, in accordance with Rules 19 and 20 (5).	The midwife attended and was cautioned.
2. Not sending for medical help for a case of ophthalmia neonatorum in accordance with Rules 19 and 20 (5).	The midwife attended and was censured.
3. Not sending for medical help in a case of abortion, in accordance with Rule 19.	The midwife attended and was cautioned.
4. Not sending for medical help for a premature and feeble child, in accordance with Rules 19 and 20 (5).	Midwife attended and was cautioned.
5. Not sending for medical help for a premature and feeble child, in accordance with Rules 19 and 20 (5).	Midwife attended and was cautioned.
6. (1) Not notifying that she had sent for medical help on four occasions (Rule 21 (1) (a)). (2) Register not kept entered up.	Cautioned.
7. Not sending for medical help for a feeble child (Rules 19 and 20 (5)).	Cautioned.
8. (1) Not sending for medical help for a child suffering from ophthalmia neonatorum (Rules 19 and 20 (5)). (2) Not sending to Local Supervising Authority that medical help had been sought until 3 days afterwards.	Midwife attended. A <i>prima facie</i> case of negligence was found and it was decided to report her to the Central Midwives Board. She has since been struck off the roll of midwives.

Future Supply of Midwives.—Hitherto the demands made by districts for midwives have been met. This has been made possible by the action of the County Council and of the Nursing Federation.

Under the present arrangement the County Council repay to the Shropshire Nursing Federation three-fourths of the actual cost of the training and equipment of any maternity nurses, who have been recommended by the Federation, and approved by the County Medical Officer of Health. Nine nurses were sent for training by the Nursing Association during the year 1909, and three were trained apart from the Federation, making 12 in all. In 1910, 10 ; in 1911, 5 ; and in 1912, 13 midwives were trained.

During 1913, twelve nurses were sent for training by the Shropshire Nursing Federation, and seven trained by the Rural Midwives Association were taken over by the Federation with the approval of the County Council. In addition, two nurses were trained by the County Council to work under local supervision.

The more complete enforcement of Sec. 1 (2) of the Act since April 1st, 1910, has not, with the exception of a few localities, caused any great inconvenience in this County. This is due to the fact that an exceptionally large number of midwives were originally enrolled, and that under Rule B (2) a number of midwives were added in those districts where they were most needed.

In certain localities there is undoubtedly a serious scarcity of midwives. This scarcity is most marked in the Borough of Bridgnorth and practically all the Rural District of Bridgnorth, in Clun, Bedstone, Stowe, Bitterley, Hopton Cangeford, Knowbury, Trefonen, Treflach, Cefnblodwell, and Porthywaen, and also the country between Minsterley and Lydham.

It is quite evident that a fresh and serious difficulty will be created as the older midwives die off or become less capable of work, for they are living under conditions that will not support a trained midwife.

Provision can under present conditions best be made by the formation of Local Nursing Associations, and towards this work there will probably be a Government Grant in the near future.

Many parishes are much too small to support a nurse, and in these cases the difficulty can only be overcome by the proper grouping of parishes.

It is important that the localities in which there is a scarcity of midwives should consider this matter without delay. Efforts are being made to discover unqualified practice, and when such practice comes under the notice of the Local Supervising Authority legal proceedings are taken. It is too late then for the locality to plead that no other midwife is available.

In 1913 proceedings were taken against one unqualified woman who was practising midwifery. She was fined one shilling and costs (22s).

National Insurance Act.—The maternity benefit under this Act should not only be a great help to the household but should materially improve the conditions of practice of the midwife.

The benefits under the Insurance Act in a case of confinement consists of (1) payment of 30s. where the woman confined is an insured person *or* the wife of an insured person, and (2) sickness benefit for a period of four weeks (7s. 6d. a week) where the woman confined is an insured person *and* a married woman.

In nearly all confinements therefore, the household should receive 30s., and in a certain proportion, a sum of £3 in all.

The maternity benefit and the sickness benefits are administered by the approved societies for their members and by the Insurance Committee for Post Office contributors. The benefit may be administered in cash or otherwise. The importance of this is that the midwife may be paid directly and her fee assured. The fee should be commensurate with the importance of the services rendered.

There is no reference in the Act to the payment of medical fees with the exception that under Sec. 18 (1) it is stated "in the case of a midwife being selected, a duly qualified medical practitioner is subsequently summoned in pursuance of the rules made under the Midwives Act, 1902, the prescribed fee shall, subject to regulations made by the Insurance Commissioners, be recoverable as part of the maternity benefit."

The Commissioners have fixed these fees. It hardly appears as if the difficulties connected with the payment of medical men sent for in emergencies under the rules of the Central Midwives Board, have been satisfactorily solved by the Insurance Act.

It is interesting to note that in the last four years medical help has been sent for in 12.5 per cent. of the cases attended by qualified midwives. Of these 1,603 or 81.3 per cent. were for the mother before, at, or immediately after confinement; 94 or 4.8 per cent. for the mother some time subsequently, and 273 or 13.9 per cent. for the child. On these figures it should be possible to estimate the total cost if adequate fees were paid to medical men sent for by midwives and how much this would amount to if averaged over the number of confinements attended by midwives.

RAINFALL.

The following figures are taken from a table compiled by the Rev. W. M. D. La Touche :—

STATIONS.	RAIN GAUGE.	DEPTH OF RAIN.	
	Height above sea level.	1912	1913
	feet.	inches.	inches.
Clee Hill	1510	43.54	33.77
Burwarton Hall	894	38.50	27.64
Woolstaston	800	39.08	35.59
Bishop's Castle	720	33.67	35.47
Wallop Hall, Westbury	700	44.95	42.48
Preen Manor	700	36.06	32.85
Oswestry, Mount Reservoir	698	36.83	36.55
Lydbury North, Walcot	662	35.57	35.54
Totterton, Lydbury North	650		34.83
More Rectory	600	34.17	36.92
Bishop's Castle Vicarage	596	36.98	38.50
Church Stretton	582	40.68	36.93
Bitterley Rectory	569	36.56	31.60
Wistanstow Rectory	482	37.51	34.00
Bridgnorth, Coton Hall	460	38.40	31.80
Onibury, Stokesay Court	432	36.09	33.98
Bridgnorth, Aldenham Park	430	33.93	28.80
Shifnal, Haughton Hall	355	34.02	29.29
Ellesmere, The Grange	343	30.98	30.97
Bromfield	320	36.89	33.09
Ludlow, Ashford House	315	40.10	34.89
Bromfield, Oakley Park	310	34.79	30.87
Shifnal, Neachley	280	34.03	32.27
Newport, Aston Hall	280	33.49	27.13
Shifnal, The Schools	279	33.74	29.05
Market Drayton, Buntingsdale	276	36.08	29.52
Whitchurch, Fenn's Bank	271	29.89	29.42
Shifnal, Hatton Grange	262	33.78	27.00
Edgmond	261	32.20	26.70
Fitz Manor	253	30.83	29.36
Shrewsbury, Highfield	250	30.11	27.15
Chetwynd Park	250	34.99	27.93
Fitz Rectory	238	30.50	29.61
Newport, Harper-Adams College	220	29.83	24.99
Coton Hill, Shrewsbury	220		26.47
Shrewsbury, Ordnance Office	212	27.87	25.94
Shrewsbury, Abbey House	171	31.05	28.99
Average		35.00	31.56

PART II.

Abstracts, Etc., of Annual Reports of the Medical Officers of Health for the Various Districts.

For the seventh time the reports for the districts forming the Atcham Combined District have been issued as one report. The districts comprised in the reports are Atcham, Church Stretton, Clun, Newport and Whitchurch Rural Districts ; Dawley, Newport, and Whitchurch Urban Districts, and the Boroughs of Bishop's Castle and Wenlock.

" The Combined District was formed in 1897, by agreement among the Councils and under official sanction of the Local Government Board, for the purpose of appointing a Medical Officer of Health. A Joint Committee was formed, and met to arrange the salary and appointment of a Medical Officer of Health. The present Medical Officer of Health was appointed for one year on December 18th, 1897, and has been re-appointed in December, 1898, December, 1903, and December, 1908, for a period of five years on each occasion. The Joint Committee has not met since the date of the first appointment, the re-appointments being made by separate re-election to each of the Councils in the Combination. The salary of the Medical Officer of Health is £375 per annum, to include all travelling, stationery, and other expenses, one half of the salary being re-paid to the Councils by the County Council. The Medical Officer of Health is debarred from private medical practice, but may hold other public health appointments by consent of the Councils. He holds the appointment of Medical Officer of Health to the Church Stretton Urban District Council outside the combined district."

The Medical Officer of Health also held the appointment of Medical Officer of Health for the Borough of Shrewsbury and School Medical Officer for the Borough of Wenlock, but he has since resigned these appointments.

" I have in previous reports suggested the desirability of a division and re-arrangement of the Districts in the Combination in the interests of efficient administration. During the last year the Local Government Board prepared a scheme for dealing with the question on the lines of an ultimate grouping of the County Districts, outside the Borough of Shrewsbury, into four Combined Districts. The scheme has been referred to the District Councils for consideration, with the result that steps are being taken for the formation of a new Combined District of Atcham, to include the Centre and South-eastern Area of the County in accordance with the Board's scheme. The Eastern group of Districts of Shropshire have also had the matter under consideration."

With regard to the corrected death-rates of the District, Dr. Gepp says :—

" The noteworthy points of this comparison are :—

- (1) The general agreement of the Rural Districts together and of the Urban Districts together ;
- (2) The average corrected death-rate of the Rural Districts is about 2 per 1000 lower than that of the Urban Districts ;
- (3) The average Urban rate is a small fraction below that of Rural England, and the average Rural rate is materially lower ;
- (4) The effect of the correction in the case of Bishop's Castle. An abnormally high apparent death-rate is reduced to the level of the other Urban Districts, and is due no doubt to an exceptional proportion of elderly persons in the population."

Hospital Isolation.—I have in former reports stated my views in favour of schemes for provision of hospitals for infectious diseases being undertaken for the County as a whole. As a result of reports of the County Medical Officer, and of an application from one Local Authority for the formation of a Hospital District, the County Council has taken action recently under the Isolation Hospitals Acts with the result of the provision shortly of hospitals for the use of six out of the ten Districts of this Combination. Orders have been made constituting a Hospital District for an area which includes Dawley Urban, and Newport Urban and Rural Districts; and for the formation of another Hospital District which includes Bishop's Castle Urban, and Church Stretton and Clun Rural, Districts."

Ophthalmia Neonatorum.—The notification of this disease is now compulsory by medical men and midwives. The object of notification is to obtain prompt and skilled treatment. It is stated that this disease causes about one-third of the cases of permanent blindness. "What is required is that the Medical Officer of Health should be empowered to engage medical attendance and skilled nursing at the public cost, in any necessary case, the work of a nurse in a severe case being to apply treatment unremittingly for a few days, under the direction of a medical man."

Tuberculosis.—In the County scheme for the prevention of tuberculosis, Dr. Gepp draws attention to the importance of appointing the nurse-inspectors as officers of the local Sanitary Authorities also.

ATCHAM (Rural).

<i>Medical Officer of Health</i>		..	..	M. GEPP, L.R.C.P.E., D.P.H.		
<i>Area in Acres</i>	..	..	..	..	..	123,200
<i>Population</i>		<i>at 1911 Census</i>		..	..	21,770
<i>Number of inhabited houses</i>		..	..	..	..	4,591
<i>Number of persons per house</i>		..	..	..	..	4.7

General Character of the District.

"The District is a very large one, some 22 miles in length by some 14 in extreme breadth, its area being 125,207 acres. The river Severn runs through it from north-west to south-east, dividing it into two parts, of which the Northern and smaller part is continuous with the Midland plain, on the new Red Sandstone. The general elevation of this part is from 200 to 300 feet O.D. The Southern and larger part is more elevated, rising gradually from the river, southward and westward, from 200 to some 600 feet O.D., with considerably greater elevations on the hillsides which form the western and southern borders. The Geological formation of this part is broken and diverse. The hills are the outliers of the Cambrian and Silurian ranges of Wales and Shropshire. There are also detached but considerable exposures of the coal measures and of the Permian Red Sandstone. There is in both parts a variable, but generally considerable, thickness of drift overlying the strata. The drainage is, on both sides, to the Severn, by numerous small tributary streams. The Borough and County town of Shrewsbury lies nearly in the centre of the district.

"The district is entirely rural in character, for the most part fertile and highly cultivated, supporting a comparatively large agricultural population, distributed in numerous villages, in smaller hamlets, and largely also in scattered isolated dwelling houses. The density of population is equal to about 111 persons to the square mile. A few coalmines are worked around Hanwood, but many parts of the small coal-fields are abandoned. Extensive quarries of Quartzite Stone, for road metal, are worked at Pontesbury."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	11.2	.28	.80	.0	.71	.57	1.46	69	21.2

The net crude death-rate for the year is the lowest recorded.

Infectious Disease.—Nine cases of scarlet fever, 19 of diphtheria, 27 of pulmonary tuberculosis and 7 of other forms of tuberculosis were notified. A small epidemic of diphtheria occurred at Molverley in November, 8 cases occurring in 4 houses and 2 cases in adjoining houses in Shrawardine parish. “The earliest notified cases in this outbreak were five in one family, and appear to have followed on an unrecognised case in the same family. A remarkable persistence of infection was shown. The cases followed each other at dates between October 5th and 27th, and as regards three of the children affected, swabs taken by the medical attendant on November 24th, December 17th, January 22nd, and March 4th, have been reported as still showing diphtheria bacilli. Thus three children, who had mild attacks of diphtheria, are still found infective after a period of practically five months.

“Such cases show the value of the rule, of the Local Education Authority, requiring a certificate of bacteriological freedom from diphtheria before a child notified as having diphtheria is allowed to return to School. And it is clear that a more extended system of swabbing, applied to cases other than school children, and contacts in affected families and schools, is necessary for the better control of diphtheria. Such systematic swabbing would be possible only with the general appointment of combined School Nurses and District Health Visitors in the County.”

Protective inoculation with anti-toxin was given in one household.

Tuberculosis.—There were 17 deaths from pulmonary tuberculosis and none from other forms. The notified cases have not so far been visited, but in all fatal cases the Sanitary Inspector has carried out disinfection of infected premises. Two shelters have been purchased for non-insured persons.

Hospital Isolation.—There is no isolation hospital for the District, but an arrangement for the prompt despatch of a tent in case of small-pox. “I have referred to the question of Hospital accommodation in former reports, advising the provision of permanent provision for infectious diseases in the District. A scheme for the provision of Isolation Hospitals throughout the County has been prepared by the County Medical Officer, and during the year two Orders constituting Hospital Districts in East Shropshire and South Shropshire have been made and confirmed under the Isolation Hospitals Acts. The hospitals are intended to provide accommodation for advanced cases of phthisis as well as for scarlet fever, diphtheria, etc. The Hospital Districts already formed do not include any part of the Atcham Rural District, and as regards the general scheme it has so far been considered that the needs of the District can best

be served either by a combination with the Borough of Shrewsbury for the purpose, or by the Rural District providing its own independent Hospital. I am in agreement with the opinion, as from geographical conditions the Rural District could only be conveniently fitted in with other Districts in the County by dividing it into three or four parts."

Disinfection is carried out by spraying with formalin. There is an emergency steam disinfecter. It is not used in routine disinfection.

Water Supply.—There are public systems of supply at Meole Brace, Pontesbury Village and Bayston Hill, and private systems from springs or wells at Acton Burnell, Albrighton, Buildwas, Condover, Cound, Cressage, Dorrington, Eaton Constantine, Frodesley, Grafton, Harley, Harnage, Pitchford, Leaton, Ruckley, Rushton, Shrawardine, Uppington and Upton Magna. Elsewhere the supply is from pumps and wells.

Much good work has been done in recent years in improving the construction and protection of wells.

Public Supplies.—*Meole Brace*.—The supply has been well maintained. *Pontesbury*.—The supply has been maintained and the improvements of the supplies to Pontesbury Hill have been satisfactory. *Bayston Hill*.—The supply has been ample, and during the year, 15 more houses have been supplied. The extension of the 3-inch main to the Sharpstones Lane will be carried out during the spring.

New Schemes of Public Supply.—*Ryton*.—The lower part of this village has now an ample supply from a tube well 96 feet deep. *Cross Houses*.—Negotiations with the property owner have been abortive, and nothing further has been done.

Improvements have been made at various pumps and wells.

The following improvements have been made to private supplies:—*Arscott* (Eaton Constantine Parish).—The well has been condemned, and boring operations for a new well are in progress. *Coalpits* (Eaton Constantine).—The water supply to seven houses having been found unsatisfactory, another supply has been laid on from a spring well of proper construction on the high ground. The water will be piped to a tap in a convenient position. *Acton Burnell*.—The work carried out by the owner in 1912 has effected a great improvement.

Sewerage and Drainage.—Meole, Pontesbury, Minsterley, Dorrington, Asterley and Bayston Hill have systems of drainage. In some of the other villages there are lengths of sewer maintained by the Council, but elsewhere the drainage is by individual drains. The *Pontesbury* new sewerage scheme is now completed. The outfall works consist of septic tanks and percolating filters, with final treatment for removal of humus through sand filters. Sludge is treated on clinker filters. An acre of land was purchased for the works.

About 40 houses have already been connected to the sewers. *Meole Brace*.—A short extension of the 8-inch sewer along Washford Lane has been made, and the land at the outfall works has been underdrained.

Excrement Disposal.—With the exception of the village of Meole Brace, where water-closets are in general use, and of numerous residences throughout the District, the disposal of sewage is by privies and earth closets. One hundred and thirty-three conversions from privies to earth closets were made during the year, and during the past four years, 380 have been converted. In *Meole Brace* there are 300 water-closets, 28 pail closets and 6 privies. The earth closet advocated is on the 'dry-catch' principle. "It consists essentially of a receptacle above ground level, formed by the side and back walls of the closet and the riser under the seat, the

receptacle opening by a door at the back and ventilated freely by small perforations in the back and sides, the floor being formed by concrete or a stone slab laid with a very slight fall from front to back, the slope being sufficient to allow liquid to drain off while the solid excreta remain. A small trench is formed in concrete or brickwork in the surface of the ground immediately behind the floor slab and external to the closet. This trench is filled with garden soil and receives the liquid and filters and oxidises it inoffensively. The solid excreta, exposed to air, tend to dry and to cause little offence, and if lightly covered with earth are absolutely inoffensive. Scavenging of the solids is easily performed by their removal with a spade and digging into the garden."

Refuse Disposal.—There is no system of public scavenging in the District. The matter of the scavenging of Meole Brace has been under consideration by the Council and is now in abeyance.

Housing is, on the whole, in a fair condition, but there is no excessive accommodation. There is a large number of very old houses becoming worn out and needing inspection and attention in order to keep them from becoming unfit for habitation. In the absence of alternative accommodation, closure of such houses is difficult.

Cressage.—A loan of £993 has been sanctioned by the Local Government Board for building six houses.

Withington.—A loan of £425 has been sanctioned by the Local Government Board for the purchase and improvement of eight houses which have been represented as unfit for habitation owing to deficiencies of air space and ventilation. Three pairs of houses are to be converted to three through houses and the remaining two, improved as regards their lighting and ventilation.

Overcrowding.—Twelve cases were dealt with during the year.

Housing Inspection.—"The records of inspection are considered regularly by the Sanitary Committee, who report to the Council. The records are kept on a 'case paper' system, carefully filed and indexed, each house reported upon being kept under review until all necessary repairs have been done, or the house has been demolished.

"The above figures are furnished by the Sanitary Inspector, and show a large amount of thoroughly good work of house repair and sanitary improvement effected by him in the course of this inspection. I have visited much of the property which has been dealt with, and found much excellent work done, the special points noted being increase of light and ventilation by new and enlarged windows, removal of earth from contact with walls, paving of ground surface adjoining the house, re-tiling of kitchen floors and concreting of scullery or wash-house floors, and provision, where necessary, of sanitary types of closets, and improved drainage and water supply.

"As regards eight houses considered unfit for habitation during the year, three closing orders were made and one of the houses was put into a fit state, the other two remaining under consideration. Three houses were voluntarily closed by the owners, one of these being re-placed by a new house.

"Consideration of these figures and of those of 'over-crowding,' to which I have referred while not indicating any alarming conditions of housing in the District, points definitely in my opinion to the eminent desirability of the Council taking a progressive view of the question and of steadily keeping a building and re-housing policy in view."

Permissive Powers.—Sections 29, 30, and 31 of the Public Health Acts (Amendment) Act, 1890, applying to slaughter-houses, have been adopted. The Infectious Diseases (Prevention) Act, 1890, is not adopted in the District.

By-laws, applying to the whole Rural District, have been made as to Nuisances, New Streets and Buildings, Private Scavenging, and Slaughter-houses.

The Nuisance By-laws were re-modelled and applied to the whole District during the year, and a new set of Building By-laws were adopted for the whole District on the lines of the model Intermediate Code.

Slaughter-houses.—There are 20 in the District. They are periodically inspected but not specially at times of slaughtering.

No tuberculous carcases were found.

Bakehouses.—There are 20 bakehouses registered in the District ; inspected periodically.

Dairies, Cowsheds and Milkshops.—There are 214 cowkeepers and milksellers on the register. The Model Regulations are in force. Much good work has been done in obtaining better structural conditions in the cowsheds.

No action was taken by the Council as regards tuberculous milk.

Fourteen cases of suspected tuberculosis in cattle were reported under the Tuberculosis Order. The results were that five beasts were condemned and slaughtered. None of these were cows in milk.

BISHOP'S CASTLE (Urban).

<i>Medical Officer of Health</i>				M. GEPP, L.R.C.P., D.P.H.			
<i>Area in Acres</i>	..	..	..	..	..	..	1,867
<i>Population</i>	<i>at 1911 Census</i>			..	..	..	1,409
<i>Number of inhabited houses</i>	..	..	..	..	..	..	360
<i>Number of persons per house</i>	..	..	..	..	..	..	4.1

Physical Features and General Character of the District.

"The Borough forms an area some three miles in length by a mean breadth of about one mile, lying within the south-west border of Shropshire, touching the Montgomeryshire border at one end, but otherwise surrounded by the Clun Rural District. It has the small town of Bishop's Castle about the centre. The elevation varies from about 500 feet O.D. in the valley at the south-east end to 1000 feet or more in the hill country forming the north-west end. The town lies on a hillside rising out of the valley, the main street rising steeply from about 600 feet to 700 feet O.D., and the houses are placed on either side of the street and about the crest of the hill above it. The subsoil is the Wenlock and Ludlow beds of upper Silurian age. The natural drainage is from north and west to south and east by small streams, the district lying upon the drainage system of the river Teme. The town is a market town and borough of great age, and the area outside is very sparsely populated. There are no industries in the district."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	19.8	.0	1.42	.70	.70	2.13	.70	48	14.9

Infectious Disease.—One case of diphtheria, 17 of scarlet fever, 1 of enteric fever, 2 of pulmonary tuberculosis and 1 of other forms of tuberculosis were notified. The case of diphtheria was of obscure origin.

Arrangements have been made for the supply of anti-toxin.

The 17 cases of scarlet fever occurred in 9 families, and the spread was to some extent due to school infection. The case of enteric fever was of obscure origin and gave negative results to Widal's test.

Tuberculosis.—In the fatal cases the Sanitary Inspector visited and disinfected the rooms and inspected the premises. In one of the two fatal cases the family had only been a few months resident in the town.

Isolation Hospital.—There is no isolation hospital either for ordinary infectious disease or small-pox. The District is included in the Joint Hospital District now formed.

Disinfection.—Disinfectants are provided by the Council where necessary, and the Sanitary Inspector has a spraying apparatus. The Council have an emergency steam disinfecter in conjunction with the Clun Rural District.

Water Supply.—The supply is upland surface water from uninhabited moorlands. Examination shows the water to be of excellent quality. A good supply was maintained through the year, but it was found desirable to turn off the supply at night for some six weeks. The pumping plant below the reservoir was in use for about eight weeks. The population supplied by the scheme is about 1,200, and there are very few houses in the town that are not connected.

Sewerage and Drainage.—The work successfully carried out in 1910 has constituted a great sanitary advance. Over 100 drains have been re-laid and connected to the sewers during the past three years. There is still a good deal of work to be done.

Excrement Disposal.—There are 219 water-closets, 6 pail closets and 44 privies in the town proper. Forty-seven of the water-closets are hand-flushed. Seventy-one old privies have been converted to water-closets during the last 4 years. Six were converted last year.

Removal of House Refuse.—Public scavenging came into operation early last year, the collection being weekly. Fixed ashpits have been abolished and some 20 galvanised iron bins and about 300 buckets and boxes are in use. The cost of collection and disposal to the Council is about £30.

Housing.—The town is very old and there are a good many cottages which need inspection and attention, although a good deal of improvement has been noticeable during recent years.

Housing Inspection.—A start has been made by the Surveyor and Inspector since his appointment in November, 1912.

Overcrowding.—One case was discovered and dealt with by notice during the year.

Permissive Powers.—"The Infectious Disease (Prevention) Act, 1890, and the Public Health Acts (Amendment) Act, 1890, Part III., are adopted.

"The Council has adopted Part IV. of the Public Health Acts Amendment Act, 1907. The sections in force are secs. 52 to 68 inclusive (with the exception of sec. 59), and give increased power in dealing with outbreaks of infectious disease. I am of opinion that the Council would now find it of advantage to adopt Part III. of this Act, which contains important sanitary provisions, especially in dealing with drains and closets, giving the Council more definite and ample powers in these respects.

"By-laws have been made in respect to nuisances, cleansing of footways, removal of house refuse, cleansing of earth closets, privies and ashpits, slaughter-houses, common lodging houses, and new streets and buildings."

Slaughter-houses.—There are 4 on the register; inspected periodically and at times of slaughtering. No tuberculous carcasses were found.

Common Lodging Houses—two on the register; inspected regularly.

Dairies, Cowsheds and Milkshops.—There are 9 cowkeepers on the register. There is no veterinary inspection of dairy cows, and no action has been taken with regard to tuberculous milk.

BRIDGNORTH (Urban).

Medical Officer of Health .. L. E. DICKSON, M.D., M.R.C.S., L.R.C.P.

<i>Area in Acres</i>	..	..	..	..	..	3,018
<i>Population</i>	at 1911 Census	..	..	..	..	5,768
<i>Number of inhabited houses</i>	..	..	..	..	..	1,346
<i>Number of persons per house</i>	..	..	..	..	..	4.3

General Character of the District.

"The Borough of Bridgnorth is situated on the river Severn, and is divided by that river. The Borough consists of four parishes:—St. Leonard's, St. Mary Magdalene, Quatford, and Quatt Jarvis, of a total area of 3,018 acres. The population at the census of 1911 was 5,768. Geographically, Bridgnorth is divided into a High and a Low Town. The High Town, so called from being situated on a sandstone rock, 250 feet above sea level, is situated on the west bank of the river Severn, and the Low Town is mainly on the east bank of the river, 130 feet above sea level. Bridgnorth is a centre for a large agricultural district, and a weekly market for farm produce takes place in the High Street every Saturday. There is also a fortnightly stock market at the local Smithfield. Its principal factories are a carpet factory, a spinning mill, and a silk printing mill."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	12.1	.34	1.04	.17	1.04	1.38	.86	104	19.9

The infantile mortality rate was 104 and included 4 premature births.

Infectious Disease.—Three cases of scarlet fever, 1 of enteric fever, 3 of erysipelas, 9 of tuberculosis and 3 of other forms of tuberculosis were notified. The case of enteric fever is said to have been contracted in another district.

Disinfection is carried out by fumigation with formalin after all cases of infectious disease and deaths from phthisis. Lime-washed walls are re-limewashed, and bedding, etc., disinfected with steam.

Hospital Accommodation.—There is a hospital used for scarlet fever and diphtheria, but arrangements are made for immediate isolation of cases of small-pox at this hospital.

Water Supply.—There is a dual system, good drinking water being obtained from the Oldbury wells, and water for other purposes from the river. River water is filtered through a battery of four Candy filters and afterwards through sand filters. These waters are reported by the Analyst as "very good" and "excellent."

Housing and Town Planning Act.—Fifty-nine houses have been inspected under the Regulations; eight have been represented as unfit for habitation; in three of these, closing orders were made and five are under consideration.

Sewerage and Drainage.—The sewage works for the north part of the town act satisfactorily. The water-closet accommodation in some parts of the town is insufficient. There are 3 vault privies in the town proper, and privies and earth closets in the rural part of the Borough.

Disposal of House Refuse.—Public scavenging is undertaken by the Sanitary Authority, and removal is carried out monthly, weekly, or more often, if desired. The refuse is tipped at the sewage works.

Schools.—The schools are in a sanitary condition.

Inspection of Meat and Foods is carried out by the Sanitary Inspector. No carcasses were condemned for tuberculosis.

Milk Supply.—Regulations are in force. There are 22 cowsheds and dairies on the register; inspected regularly. One insanitary cowshed and one dairy have been reported to the Sanitary Committee.

Factories and Workshops have been inspected regularly and are satisfactory.

Bakehouses—14 on the register ; one is partly underground, but complies with the regulations of the Council. They are kept clean and properly lime-washed.

Permissive Powers.—"The following Acts are not adopted in this Borough :—Public Health Acts (Amendment) Act, 1890 ; Infectious Diseases (Prevention) Act, 1890 ; Public Health Acts (Amendment) Act, 1907."

"*By-laws* are in force with regard to Nuisances, Cleansing of Footways, Slaughter-houses and Common Lodging Houses. There are no By-laws in force with regard to New Streets and Buildings, Houses let in Lodgings, Offensive Trades, Tents, Vans, etc., used as habitations."

BRIDGNORTH (Rural).

Medical Officer of Health .. J. C. PADWICK, M.R.C.S., L.R.C.P.

<i>Area in Acres</i> ..	..	..	..	..	..	70,521
<i>Population</i>	<i>at 1911 Census</i>	..	..	..	..	9,125
<i>Number of inhabited houses</i>	..	..	..	..	..	2,061
<i>Number of persons per house</i>	..	..	..	..	..	4.4

General Character of the District.

"Bridgnorth Rural District is an agricultural area surrounding the Bridgnorth Urban District, and is nearly equally divided by the river Severn. It contains 27 parishes, with a total area of 70,521 acres, and an estimated population of 9,140. The principal parishes are those of Worfield, Claverley, and Alveley, with a population at the last Census respectively of 1,448, 1,358, and 940. The occupation of the inhabitants is that of agriculture. There is also a coalmine which is extending its operations at Billingsley, and a stone quarry on the Brown Clee Hill."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	11.1	.32	.10	.43	.43	.43	1.20	61	23.1

Infectious Disease.—Thirty-nine cases of scarlet fever, 2 of enteric fever, 5 of phthisis and 8 of other forms of tuberculosis were notified. More than 30 of the scarlet fever cases occurred in the parish of Worfield in June and July. "Both cases of enteric fever were of a serious type and proved fatal." Measles, whooping cough and mumps were the causes of closure of three schools.

" *Disinfection* of houses is carried out by the Sanitary Inspector after all notifiable disease. The rooms are fumigated with formalin or sulphur dioxide, walls are white-washed or re-papered, and the floors scrubbed with carbolic."

Water Supply.—With the exception of Alveley and Worfield, and a few houses at Cleobury North, Ditton Priors and Monkthopton, the supply is from individual wells. There was no complaint of failure or pollution.

Pollution of Streams.—No pollution has come under the notice of the Medical Officer of Health.

Sewerage and Drainage.—Pail closets and privies are employed throughout the district. In 26 instances, house drainage was re-constructed.

Scavenging.—There is no public scavenging.

Housing.—One hundred and twenty houses were inspected under the Housing and Town Planning Act ; 8 were represented as injurious to health, and 5 closing orders were issued in consequence.

The huts at Billingsley are still in use, but the Medical Officer of Health is assured that they will be closed this spring.

The sanitary conditions and water supplies of the schools are satisfactory.

Milk Supply.—" Nineteen cowkeepers and milksellers are at present on the register. Their premises have all been regularly inspected and are in a fairly sanitary condition. In some instances more attention should be paid to the cleansing of floors, the white-washing of walls, and the removal of manure, which in many instances is placed too close to the cowsheds."

BURFORD (Rural).

<i>Medical Officer of Health</i>				A. E. WHITE, M.B., D.P.H.			
<i>Area in Acres</i>	..	..	..	..	..	..	7,798
<i>Population</i>	at 1911	<i>Census</i>	..	..	..	..	1,308
<i>Number of inhabited houses</i>	..	..	..	..	..	..	286
<i>Number of persons per house</i>	..	..	..	..	..	..	4.5

General Character of the District.

" It lies on the southern slopes of the Clee Hill, and for the most part at an elevation of 200 to 800 feet above sea level. It covers 7,798 acres, and is the smallest Rural District both as regards area and population in the County. It is entirely rural and agricultural, and is composed of five parishes. There is one person to about six acres, and an average of 4.8 persons per house.

" There is a Cottage Hospital on the southern border, which is chiefly used and supported by the neighbouring town of Tenbury. The Workhouse is in Tenbury."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	9.8	.0	1.51	1.51	.0	.75	2.26	37	20.4

There were 4 deaths from tuberculosis and 3 from cancer.

Infectious Disease.—Two cases of diphtheria, 2 of scarlet fever, 1 of enteric fever, 1 of phthisis and 2 of other forms of tuberculosis were notified. The two cases of diphtheria were in one house and were associated with insanitary conditions. One case of scarlet fever was caught from the other. The case of enteric fever was attributed to polluted water. Schools were closed on account of mumps and influenza.

Housing Accommodation.—Ten houses were inspected under the Housing and Town Planning Act, and defects in seven were remedied. The district is on the whole pretty well supplied with houses. There was no case of overcrowding reported.

Water Supply—mostly from wells ; the danger of pollution is constant.

Refuse Disposal—quite satisfactory by tenants on gardens.

Cowsheds and Dairies.—There are two cowsheds ; inspected half-yearly and no defects found. There is no slaughter-house and only one bakehouse.

“The most important sanitary work in such a district is the systematic inspection of cottages, so that the district may be covered in about three years.”

CHIRBURY (Rural).

Medical Officer of Health .. J. R. WOODS, B.A., M.R.C.S., L.R.C.P.

<i>Area in Acres</i>	27,045
<i>Population</i>	3,304
<i>Number of inhabited houses</i>	811
<i>Number of persons per house</i>	4.1

General Character of the District.

“The District is purely agricultural except for a little lead and barytes mining in some parts. The population is diminishing slightly.”

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	13.0	.0	1.21	.30	1.21	.60	1.21	60	15.1

Two of the three deaths under one year of age were unpreventable.

A district nurse has been provided for Chirbury and Marton Parishes. Efforts have been made to provide one for Worthen Parish.

Infectious Disease.—Seven cases of scarlet fever occurred in one family, and owing to the impossibility of proper isolation, they were removed to the small-pox hospital at Forden. The outbreak was checked.

Disinfection is carried out by the Sanitary Inspector.

Tuberculosis.—The Council has purchased a shelter for the use of tuberculous patients.

Water Supply.—Chirbury has a satisfactory supply. The Marton scheme has been carried out, and Brockton and Worthen scheme is before the Local Government Board.

Drainage and Sewerage are on the whole good.

Water-closets and privies are mostly of the pan or privy midden type. The middens are being gradually re-placed by pan closets.

Removal of House Refuse is in the hands of occupiers and is on the whole satisfactory.

Housing Accommodation is quite good considering the character of the neighbourhood. Many of the houses are old and faultily constructed. Dampness and defective ventilation are carefully attended to. Much good work has been done during the last eight years.

Workshops.—They are all of a small type.

Milk Supply.—A register of milksellers is kept and their premises inspected. More attention is paid to cleanliness and ventilation of cowsheds.

CHURCH STRETTON (Urban).

Medical Officer of Health M. GEPP, L.R.C.P., D.P.H.

<i>Area in Acres</i> .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	978
<i>Population</i>	at 1911 Census	.. ..	.. ..	.. ..	.. ..	.. ..	1,455
<i>Number of inhabited houses</i> .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	288
<i>Number of persons per house</i> .. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	5.0

Physical Features and General Character of the District.

"The District comprises the small ancient town of Church Stretton, lying in an open valley running nearly North and South, 600 feet above sea level, together with the lower slopes of the bold hills which form the sides of this valley, and which rise to some 1,600 feet O.D. The area is 978 acres. The subsoil of the valley is glacial drift, generally of dry and well drained gravel, the hillsides to the West being of hard Longmyndian rock strata, of Pre-Cambrian age, those to the East being also of hard rock, of Ordovician age. The town lies on a watershed, the natural drainage of the valley being on the North towards the Severn, and on the South towards the Teme, the fall being gentle in either direction. The situation is one of great natural beauty and healthfulness, and in consequence the number of residents and visitors has for some years been increasing. The Urban District was constituted in 1899.

"The area of development and of new building has been rapidly extended, and the character of the place has been changed into that of a modern residential district, and a health and holiday resort of high class, for which its open elevated situation and beauty of surroundings well fit it.

"Climate, soil, aspect, and natural drainage are favourable to a high standard of health, and such it certainly enjoys. The Council has since its formation been active in promoting and encouraging the progress of the district on sound sanitary lines. The Urban District has acquired the waterworks, giving a plentiful supply of soft and excellent upland water, laid on to every house, and an admirable and extensive scheme of sewerage has been carried out, with the result that the town is thoroughly well drained.

"The development of building and laying out of new streets has been well regulated under a very complete and carefully considered series of By-laws. A public system of removal of house refuse has been adopted, and the Council is prepared through its Surveyor to test the drainage of any house and to issue to the householder a certificate of sanitary efficiency where the drains pass the test. This is designed to encourage householders to keep their drains and sanitary arrangements up to a high standard, and as an assurance to visitors to houses in the district, where the certificate is obtained and exhibited."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	9.1	.0	.65	.65	.0	1.30	.0	42	15.7

The infantile mortality rate was based upon the death of one infant who lived only a few hours.

Infectious Disease.—Two cases of diphtheria and 17 of scarlet fever were notified. One of the cases of diphtheria was imported. The cases of scarlet fever were mild. The connection between the cases was not as a rule traceable, but there was no marked school influence. One case was discovered peeling in school.

Tuberculosis.—One case of pulmonary tuberculosis was notified. The patient was treated in the Shropshire Sanatorium. There was one death. The premises were disinfected after death.

Hospital Isolation Accommodation.—The district is included in the Joint Hospital District for the south and south-west of the County.

Water Supply.—The District has an ample supply of soft upland water purchased from the Church Stretton Water Company in 1912, for the sum of £17,850. There are two reservoirs, one, twelve million gallons, at a height of about 1000 feet O.D., and the other at a height of 800 feet O.D. The gathering grounds are uninhabited and uncultivated moorland, grazed by sheep and ponies.

The following recommendations have been made :—(1) The taking of the whole supply from the large reservoir (2) consideration of increasing storage or providing filtration for water from small reservoir (3) arrangements for regular inspection of the banks of the streams and for removal of objectionable matter (4) the desirability of periodical chemical and bacteriological analyses of the water. Arrangements have been made for the regular inspection of the reservoirs and banks of the contributory streams, and the question of supplying all consumers from the large reservoir is under consideration.

Sewerage and Drainage.—The sewerage scheme was completed in 1906, and the outfall works are situated two miles to the south of the town. The sewers are provided with manholes and ventilating shafts and with three automatic flushing tanks. The manholes are inspected weekly and the sewers found to be self-cleansing.

The disposal of the sewage is by septic tank, contact beds, storm water filters and land filtration. Three hundred houses are connected to the sewers and 19 outlying houses not connected.

House drains are required to be laid in accordance with the Building By-laws and the Council's Drainage Regulations. Drainage systems are tested by the Surveyor and certificates given where satisfactory.

Excrement Disposal.—Two hundred and eighty-five houses have water-closets, 15 have pail or earth closets, and 19 have privies. One privy was converted to an earth closet during the year and three were abolished. " Though most of the remaining privies serve houses in outlying situations, there are still a few in the town which might, with sanitary advantage, be converted."

House Refuse.—The Council undertakes a weekly collection and has a tip outside the town. Two hundred and ninety houses have been provided with galvanised iron portable bins, 26 have other portable receptacles and only 3 have fixed ashpits. Refuse is collected in open carts, but the provision of covered carts is under consideration.

Scavenging Roads and Streets.—The streets are swept twice daily in the centre of the town and on alternate days in the outlying parts.

House Accommodation.—" Air space about houses is adequate. There are some old yards and back premises where paving, re-drainage, and provision of w.c.'s and proper manure receptacles is required. Otherwise the surroundings of houses are generally clean."

Reference has been made in previous reports to the desirability of the provision of houses for the working class. " The Council has under consideration a scheme for the purchase of land and the erection of a number of houses for the working classes."

Overcrowding.—Two cases were dealt with.

The published figures of the 1911 Census show a very low proportion of overcrowding in the district.

Housing Inspection.—Of the 10 houses scheduled and inspected, 9 were put into repair in accordance with the notices. Six, including 5 brought over from 1912, remain under consideration.

Permissive Powers.—" The adoption of the Infectious Disease (Prevention) Act and of the Public Health (Amendment) Acts, 1890 and 1907, together with By-laws as to Nuisances, has been advised in previous reports and has been considered by the Council from time to time. The Council has now adopted the Infectious Disease (Prevention) Act, 1890, and the Public Health Acts Amendment Act, 1890, which came into operation during last year. The adoption of certain sections of the Public Health Acts (Amendment) Act, 1907, is under present consideration."

By-laws as to Nuisances are also adopted.

By-laws are in force with respect to slaughter-houses and new streets and buildings. Regulations for dairies, cowsheds and milkshops are also adopted.

The adoption of a new series of By-laws as to new streets and buildings is also under consideration.

Slaughter-houses.—There are 2 on the register ; periodically inspected and occasionally at times of slaughtering.

No tuberculous carcasses were found.

Dairies and Cowsheds.—There is one registered cowkeeper. The premises are inspected regularly.

Bakehouses.—There are 6. They are inspected and have been improved in recent years.

CHURCH STRETTON (Rural).

Medical Officer of Health M. GEPP, L.R.C.P.E., D.P.H.

<i>Area in Acres</i>	45,106
<i>Population at 1911 Census</i>	4,797
<i>Number of inhabited houses</i>	1,069
<i>Number of persons per house</i>	4.5

General Character of the District.

"The District is one of hills and dales, highest across the centre from west to east, forming the watershed between the Severn and Teme river systems, and sloping gently to north and south. The natural drainage is by various small streams rising in the uplands, and affording good natural drainage towards the Severn on the north, or the Teme on the south side of the watershed. Three parallel ranges of hills run through the district from south-west to north-east, the "Longmynd" range, of Pre-Cambrian age, along the western side, the steep escarpment of "Wenlock Edge," of Silurian age, along the eastern border; while between lies a tract of Ordovician age, through which the Caradoc and Hope Bowdler range of hills rise. The elevation varies from 1,700 feet at the summit of the Longmynd moorland, to some 400 feet at the northern and southern limits of the district. The hillsides are largely cultivated, but in the higher parts are uninhabited moorland. Between the ranges are fertile valleys with several villages and many isolated farms and cottages.

"The district is entirely rural and agricultural. In the centre lies the small Urban District of Church Stretton. There is an unimportant exposure of coal measures at the north end of the district. These measures are not now worked."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	10.3	.0	.20	.0	1.44	.41	.82	83	17.4

The infantile mortality was due to 7 deaths, of which 5 were from premature birth or congenital debility.

Infectious Disease.—Thirty-three cases of scarlet fever 1 of diphtheria, and 1 of enteric fever were notified. The cases of scarlet fever occurred in 24 households and were scattered throughout the area. School influence was not marked. "One series of cases in Acton Scott parish, and one case in Wistanstow parish appeared traceable to prolonged, or returned, infection in apparently recovered patients."

"In some of the cases the possibilities of isolation and treatment at home were notably defective, and hospital isolation would have been of great benefit."

The cases of diphtheria and enteric fever were obscure in origin.

Tuberculosis.—Two cases of pulmonary tuberculosis were notified with one death.

Hospital Isolation.—A Joint Hospital District has been formed.

Disinfection.—There is no steam disinfecter. The Inspector disinfects rooms.

Water Supply.—There is no public system of water supply in the district, but small combined supplies at Leebotwood, Plaish, Shipton, part of Wistanstow, and Woolstaston villages, and Woolstone hamlet.

The village of Little Stretton is supplied by the Church Stretton Water Company, and All Stretton by a small local company.

The water supply of Bushmoor and Leemore Common has been improved during the year.

It is recommended that the school supply at Cardington be improved by laying a drawpipe at St. James's well and the erection of a pump for the school.

Longnor.—"The owner of this village has under consideration a scheme for a gravitation supply from upland springs on Lawley Hill."

"Many farms in the district have good supplies piped from springs in the hillsides, but cottagers have often to go a considerable distance to fetch water, and in some cases use water from streams which do not afford a safe supply."

Sewerage and Drainage.—*All Stretton.*—"I have reported previously on the drainage of this village. The exceptional feature here is the discharge of the main drain of a considerable private asylum, having a number of water closets, directly into the brook, causing serious pollution. The Council has endeavoured to obtain the removal of this pollution by voluntary action by the owner, but without result. Under continued pressure by the County Council as to the stream pollution the Council in 1911 engaged a firm of engineers to survey and report as to a scheme of sewerage for this village. This report was received, and the estimated cost of a scheme, without purchase of necessary land, was some £1,400. The Council has had the question under consideration throughout the year, but no further steps have been taken, the Council being again in communication with the owner of the Asylum."

"The sewage works of the Church Stretton Urban District Council are situated in the Rural District below Little Stretton. The effluent from the filter beds and land, and storm water tanks, discharges into the brook. No complaint was received during the year as to nuisance from the effluent."

Excrement Disposal is mostly by privies of old type and construction. No conversions to water-closets or pail closets were made during the year. The Inspector reports that there are 116 water-closets, 59 pail or earth closets and 790 privies.

Housing.—The houses, speaking generally are of considerable age and often undesirably small. The light and ventilation in old cottages is often unsatisfactory, particularly as regards the bedrooms.

Housing (Inspection of District) Regulations.—Forty-nine houses were inspected and reported upon.

Overcrowding.—"The total number of tenements with more than two persons per room in the district is given as 49, with a population of 399 persons, giving a percentage of 8.5 persons in private families in the district as 'overcrowded,' the corresponding percentage in Shropshire Rural Districts being 7.7."

Permissive Powers.—The Infectious Disease (Prevention) Act, 1890, and the Public Health Acts (Amendment) Act 1890 have not been adopted. By-laws for Common Lodging Houses are in force. It is recommended that by-laws for new buildings be adopted.

Common Lodging Houses—two on the register ; inspected periodically.

Dairies, Cowsheds and Milkshops.—Regulations are recommended but their adoption was postponed in view of expected legislation.

Cowkeepers on register, 14. An inspection was made in 1911. The defects found were principally as to paving, lighting and drainage, want of cleanliness, etc. Few of the structural defects have been remedied so far.

Slaughter-houses.—There are 2 in the district, but no register and no by-laws in force. They are visited occasionally to see that cleanliness is observed.

No tuberculous meat was found at visits.

CLEOBURY MORTIMER (Rural).

<i>Medical Officer of Health</i>	..	..	A. E. WHITE, M.B., D.P.H.	
<i>Area in Acres</i>	..	..	..	44,338
<i>Population</i>	at 1911	<i>Census</i>	..	6,976
<i>Number of inhabited houses</i>	..	..	..	1,419
<i>Number of persons per house</i>	..	..	..	4.9

General Character of the District.

"The District covers an area of 44,336 acres, and contains fifteen parishes. It lies on the eastern slopes of the Clee Hills, between the rivers Severn and Teme. It is very hilly and exposed, and much of it several hundred feet above sea level. The district is agricultural in character to a large extent, with two or three coal mines in the northern boundary and stone quarries on the Clee Hill. An additional pit recently opened has resulted in the building of several hundred cottages in the district. The Workhouse is at Cleobury Mortimer, near to which is also a joint Small-pox Hospital."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth rate
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	10.9	.27	.13	.41	1.25	.55	.97	64	23.

Infectious Disease.—Four cases of diphtheria, 3 of erysipelas, 8 of scarlet fever, 1 of enteric fever, 2 of puerperal fever, 1 of poliomyelitis, and 6 of pulmonary tuberculosis were notified. The case of enteric fever was probably imported from outside the district. The case of poliomyelitis was situated in the same neighbourhood as one of the cases in the Ludlow Rural District.

Five of the cases of tuberculosis were living in houses in good sanitary condition. The district is one that is very suitable for treatment in shelters.

Housing Accommodation.—"It was not contemplated when the new by-laws for New Buildings were recently adopted that another colliery village would spring up in what was previously an agricultural district, and the building of long rows of cottages produce what is practically urban conditions. Some regulation as to the amount of land to be attached to each cottage would have been an advantage."

"The Billingsley Colliery Company, which has sunk a shaft in the next district, are building their cottages in the Highley Parish. Over a hundred are built or in the course of erection. Thirty are in one long row, and the remainder are to be part of a garden village scheme."

"The Clee Hill houses have been inspected by Mr. Butcher during the year. Thirty reports have been placed before the Council, and representations of unfitness made in respect of nine of them. No closing orders have been made, in consequence of the lack of alternate dwellings.

"Seven demolition orders were made in regard to houses reported in the previous year, and resulted in repairs being carried out in all.

"The delay in carrying out the notices served under the Housing and Town Planning Act is very serious, and results in much additional work for the Inspector. In many cases the landlords decline to do anything, and look on the rent, often a shilling or two a week, as an acknowledgment of their rights to the land, and the tenant is too poor to repair his house thoroughly.

"Overcrowding is frequently met with, because the accommodation is very scanty in the cottages, usually only two bedrooms, and there are few if any, new cottages built to meet the requirements of the workers at the quarries. It seems to me that the position should be fully explained to the ground landlords and to the owners of the quarries, and if they decline to provide adequate housing accommodation for the workmen, then the Council should seriously consider the matter."

Water Supply.—"The forty new houses in the Highley Parish are supplied by a newly sunk well, the quality of the water is good and the service has been constant. Many houses on the Clee Hill have supplies, which are without proper protection or too far from the houses.

"A number of houses near the Knowle are without any supply at all, and have to carry a considerable distance. A public supply would be a great boon to this district and also to the village of Clee Hill in Ludlow Rural District. There is plenty of water running to waste over the common to provide an efficient service for all the houses requiring it."

Sewerage and Drainage.—"The drainage from the new cottages at Highley is dealt with by means of a tank for sedimentation and a filter bed and then passed into the river.

"The closets here are pail type and it is left to the tenants to dispose of the excrement and ashes. This has resulted in a very serious condition, they are either neglected or the contents of the pails is buried in the yard which is not paved.

"A regular system of scavenging is required here, and if the Company do not do it as they promised, the duty devolves on the Council. A contract should be made with some local haulier to do the work at regular intervals. Otherwise a serious epidemic is certain to occur in the near future."

The Cowsheds, Slaughter-houses and Bakehouses have been visited regularly, and are on the whole satisfactory.

Permissive Powers.—The Infectious Diseases (Prevention) Act and parts of the Public Health Amendment Act, 1890, are in force, together with by-laws relating to Slaughter-houses and Nuisances. New by-laws were adopted for new buildings during the year.

CLUN (Rural).

<i>Medical Officer of Health</i>	..	..	M. GEPP, L.R.C.P.E., D.P.H.	
<i>Area in Acres</i>	..	..	..	82,206
<i>Population</i>		<i>at 1911 Census</i>	..	6,565
<i>Number of inhabited houses</i>			..	1,517
<i>Number of persons per house</i>			..	4.3

General Character of the District.

"The Rural District is essentially a hill country, lying in the south-west of the County, and on the borders of Wales. Much of the district lies at an elevation of 1000 feet and upwards, especially in the northern and western parts. The centre and south-eastern parts consist of open valleys, at an elevation above Ordnance Datum of 400 to 600 feet, and broken and divided by small groups of hills. The main structure is that of an old elevated table-land much dissected, weathered down, and glaciated.

"The geological formation is much broken, the upper and lower Silurian, and Ordovician measures being exposed in considerable areas, with less extensive exposures of the old Red Sandstone, and of Cambrian and Pre-Cambrian measures. The natural drainage is by various streams rising in the hill country to north and west, and forming the small rivers Onny and Clun, which leave the district through the valleys of the south and east to join the river Teme.

"The District contains 16 parishes, and is sparsely populated and agricultural in character, much of the hill country being cultivated or grazed. A small area in the north was in the past worked for lead, barytes, and other minerals, but these industries are now practically extinct. The district contains the small market town of Clun in the south, and has several villages of small size which are principally placed in the valleys, and some smaller hamlets, and many isolated farmsteads scattered about the valleys and hillsides. The Borough of Bishop's Castle is within, and near the centre of the district."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth rate
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	9.5	.0	.92	.30	.92	.61	1.07	57	21.

The death-rate was the lowest on record.

The infantile death-rate was also very low.

Infectious Disease.—Seven cases of scarlet fever and one of erysipelas were notified. The cases of scarlet fever occurred in 4 houses.

Diphtheria Antitoxin Order.—Arrangements have been made for the supply of antitoxin.

Tuberculosis.—Ten cases of pulmonary tuberculosis and 5 of other forms were notified. There were six deaths from pulmonary tuberculosis and two from other forms of tuberculosis. "The cases were not as a rule visited, but in fatal cases I notified the Sanitary Inspector for disinfection of the rooms and inspection for the discovery and remedy of defects."

Two of the persons notified received treatment in the Shropshire Sanatorium. "The speedy establishment of a Tuberculosis Dispensary for the district is very desirable in view of the prevalence of tuberculosis shown by the number of deaths and of cases notified."

Hospital Isolation.—"During the year the County Council, after public enquiry, made an order constituting a Hospital District for south and south-west Shropshire. The Rural District is included in this large district, and the provision of a hospital for cases of infectious disease which cannot be effectively isolated and treated at home will be of much use and advantage."

Disinfection.—The Sanitary Inspector sprays infected rooms. The Council owns a steam disinfecter with the Borough of Bishop's Castle. It is not used in routine disinfection.

Water Supply.—There are public systems at Clun town and Newcastle village. There are now also public systems of supply for Clunbury, Clunton, Clungunford, and Brockton. "The supplies have worked efficiently and constitute a great sanitary improvement. The whole of the houses in Clunbury, Clunton and Brockton are supplied, and all in Clungunford except four outlying ones. Some 96 houses in all are supplied by these schemes. Fifteen houses were connected to public supplies during the year."

Public pumps have been provided by the Council at Chapel Lawn and Cefn Einion.

The Council has the supplying of Chapel Lawn from springs above Pentre under consideration.

Public wells are provided at Hopton Heath and Round Oak, Hopesay.

There are private combined supplies for the village of Lydbury North and the hamlets of Acton and Lydbury Down. Also small piped supplies for the school and a few houses in Linley parish, and small piped supplies for groups of houses at Norbury and at Little Brampton.

Lydham has been supplied with water by the owner from the West Onny. The water is liable to pollution and the methods of filtration are not such as to render it safe. The owner is investigating the matter with a view to finding another supply.

Sewerage and Drainage.—The principal sewers of the town of Clun discharge into the river. In 1907 the disposal of the sewage was under consideration and a report obtained from a firm of engineers.

Elsewhere there are no recognised public sewers.

Excrement Disposal.—A return of the Nuisance Inspector's shows that in the larger villages there are 19 water-closets, 40 pail closets and 202 privies.

The privies previously reported on as discharging direct into running streams have been abolished and earth closets substituted.

There is no public scavenging, but a tip is provided at Clun.

Housing.—"Speaking generally, the housing conditions in the district are very fair, though there are many old houses requiring periodic inspection and attention to keep them in a habitable condition."

Overcrowding.—"The total number of tenements with more than two persons per room in the district is given as 47, with a population of 380 persons, giving a percentage of 5.8 persons in private families in the district as 'overcrowded,' the corresponding percentage in Shropshire Rural Districts being 7.7."

Permissive Powers.—The Public Health Acts (Amendment) Act, 1890, and the Infectious Disease (Prevention) Act, 1890, have not been adopted, and the Council possesses no Urban powers under the Public Health Act, 1875. The Council has not made any By-laws.

Slaughter-houses.—There are 3 in the district; visited periodically but not specially at times of slaughtering.

No tuberculous carcasses have been found.

Dairies, Cowsheds and Milkshops.—There are 6 cowkeepers and milksellers on the register. The premises are visited periodically.

Bakehouses.—There are 7 in the district; periodically visited and very fairly kept.

DAWLEY (Urban).

<i>Medical Officer of Health</i>		..	..	M. GEPP, L.R.C.P.E., D.P.H.			
<i>Area in Acres</i>	..	..	..	..	..	..	2,790
<i>Population</i>		<i>at 1911 Census</i>		..	..	..	7,701
<i>Number of inhabited houses</i>			..	..	..	..	1,678
<i>Number of persons per house</i>			..	..	..	..	4.6

Physical Features and General Character of the District.

"The District lies at a considerable elevation upon the Shropshire Coalfield and tableland, of which it forms one of the higher parts. Its surface falls irregularly from north and north-west to south and south-east, and from 670 feet O.D. to some 400 feet O.D. roughly. The surface drainage is good owing to the steep fall of this part of the northern watershed of the Severn. The geological formation is the Carboniferous, the district being for the most part upon the coal measures, but with small exposures of the Millstone Grit in the south-western part.

"As regards its general character, it may be described as a coal and iron mining and iron working district largely worked out. Coal mines long out of work and dismantled ironworks are common features. At the present time it is chiefly the place of residence of an industrial community, many of whose members work in one or two large modern engineering or pottery works within the district, while large numbers work in mines, ironworks, and brick and tile works outside the district.

"For an urban community it is very scattered in character. There is a compact business centre, with some continuous lengths of houses radiating for some distance from it along the main roads. The rest of the district is practically rural in character, with houses isolated or in groups of more or less number.

"The district is naturally very healthy, being high, dry, and wind swept, and surface drainage being good."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Plithisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	10.7	.13	.77	.13	.64	1.16	1.03	72	30.6

The birth-rate has decreased in recent years but was higher last year.

The death-rate was the lowest recorded. The drop in the death-rate has been coincident with the laying on of a public water supply.

With regard to infant mortality, Dr. Gepp says:—"The causes of infant death given above are largely preventable, and there is scope for good work to be done by a system of health visiting, which should be organised under the Notification of Births Act by the County Council."

Infectious Disease.—One case of diphtheria, 2 of scarlet fever, 2 of puerperal fever and 5 of erysipelas were notified.

Arrangements are in force for the supply of antitoxin.

Tuberculosis.—Seventeen cases of pulmonary and 3 of other forms of tuberculosis were notified, with 6 deaths from pulmonary tuberculosis. The cases were not as a rule visited, but disinfection and inspection of the house was made after death.

Hospital Accommodation.—There is a small-pox hospital to serve Dawley and Shifnal. The district is included in the East-Shropshire Scheme.

Disinfection.—The Sanitary Inspector sprays infected premises, and disinfectants are supplied.

The provision of a steam disinfector will no doubt form part of the hospital equipment.

Water Supply is from the Madeley reservoir at a charge of 6d. per 1000 gallons up to 50,000 per diem, and 5d. per 1000 for any quantity in excess up to 100,000, which is the limit of supply. There are two reservoirs (one 175,000 gallons and one of 25,000 gallons at a higher level), and 118 standposts. The consumption of water was 24,661 gallons, or $3\frac{1}{2}$ gallons per head per day.

There are 327 houses connected to the mains and 150 supplied by wells, etc., leaving some 11,200 houses supplied from standpipes.

The Public Health (Water) Act, 1878, has been adopted, giving power to rate houses within 200 feet of the standpipes.

Sewerage and Drainage.—Many of the old sewers are rough culverts with large catchpits, but all new work is laid in pipes with cement joints and with manholes. New work is carried out as part of a general scheme. “The present outfalls of the main sewers are as a rule into open channels, running through agricultural land or waste ground, and out of the district in various directions, and eventually into water courses draining to the Severn.”

The conditions of house drainage are being steadily improved.

Excrement Disposal.—There are 85 water-closets, 67 earth or pail closets and 1,156 privies. During the year, 16 privies were converted to water-closets and 3 to earth or pail closets. Seventy-five of the old privies have been abolished during the last two years.

Scavenging.—The Council removes house refuse at the cost price of the work.

Housing.—The majority of the houses are small and of old construction. A list of houses for inspection has been prepared and the Inspector's records are regularly considered by the Sanitary Committee. The small number of inspections is due to the fact that the Council considered it better to clear off those already found defective before inspecting more houses. “I represented 23 houses as unfit for habitation, 18 of these being inspected and recorded at the end of 1912. Work on all these is well in hand.”

Overcrowding.—Five cases of overcrowding were dealt with during the year. The proportion of overcrowded houses according to the Census is very high in the district. The facts indicate need for careful investigation, and the remedy appears to lie in the provision of more houses with three bedrooms.

Permissive Powers.—Part III. of the Public Health Acts (Amendment) Act, 1890, was adopted in 1902. The Infectious Disease (Prevention) Act, 1890, is not adopted in the district. The adoption of certain parts of the Public Health Acts Amendment Act, 1907, has been under the Council's consideration.

The Council has made By-laws with respect to Nuisances, New Buildings, Slaughter-houses and Common Lodging Houses.

By-laws as to new buildings are in the form of the Model Code for Rural Districts, referring especially to drainage and sanitation.

Slaughter-houses—11 on the register ; inspected regularly and at times of slaughtering. No tuberculous carcasses were found.

Dairies, Cowsheds and Milkshops.—There are 26 on the register ; visited periodically.

Bakehouses.—There are 11 on the register ; generally in a fair condition and limewashed regularly.

DRAYTON (Rural).

<i>Medical Officer of Health</i>	..	..	..	A. MACQUEEN, M.D.
<i>Area in Acres</i>	..	..	..	51,384
<i>Population</i>	<i>at 1911 Census</i>			12,340
<i>Number of inhabited houses</i>	..	..	..	2,846
<i>Number of persons per house</i>	..	..	..	4.3

General Character of the District.

"The Rural Sanitary District of Drayton comprises an area of upwards of 51,000 acres, situated in the great central plain of England. The general elevation of the district is about 300 feet. The district extends from the parishes of Adderley and Norton-in-Hales on the north, to the parish of Woore on the north-east, where the three counties, Cheshire, Staffordshire, and Shropshire join; to the south, as far as and including the parishes of Hinstock and Child's Ercall, and the villages of Eaton and Little Bolas in Stoke parish. On the east it is bounded by the river Tern and the parish of Cheswardine. On the west it extends to and includes the village of Stoke-upon-Tern, the parish and village of Hodnet, and the hamlet of Marchamley. Near the centre of the district is the town of Market Drayton, with the township of Little Drayton adjoining, and the parish of Moreton Say. The formation throughout is the new red sandstone, which attains its greatest elevation in England in the Hawkstone Hills, near the western limit of the district. The river Tern in its winding course to the Severn drains the greater portion of the district. The land in general contour is level, well watered, highly cultivated, and there are some finely timbered estates. The population is chiefly employed in agricultural pursuit."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	12.9	.24	.40	.16	.80	.32	1.76	75	19.3

Infectious Disease.—Ten cases of scarlet fever, 1 of diphtheria, 5 of erysipelas, 1 of enteric fever, and 18 of consumption and other forms of tuberculosis were notified. In all cases of infectious disease reported, instructions are carefully given and insanitary conditions are dealt with.

Disinfection is carried out at the termination of a case and immediately after removal of patients to the Isolation Hospital. Disinfection and cleansing of the infected rooms are carried out under the directions of the Sanitary Inspector. There is a steam disinfector at the Isolation Hospital.

Diphtheria Antitoxin is supplied by the Council.

Housing Accommodation.—One hundred and thirty houses have been inspected under the Housing and Town Planning Act, and in 62 the defects were remedied without closing orders.

Removal and Disposal of House Refuse.—“ This is regulated by by-laws and the responsibility falls on the occupier. A public system should be adopted. The regular weekly removal of house refuse would decrease infectious diseases. Refuse heaps are breeding places for flies, and it has now been proved that flies carry the germs of infectious diseases from house to house.”

Excrement Disposal.—In the drainage area of Market Drayton and Little Drayton, there were at the end of 1912, 857 water-closets, 22 pail closets and 408 privies. The latter have been gradually converted into water-closets. The water carriage system should be made compulsory wherever practicable.

Sewerage and Drainage.—“ The sewage of Market Drayton is still untreated, and continues to pollute the river at the old outfall. A scheme for sewerage and sewage treatment will now have to be undertaken by the new Urban District Council.”

The scheme for the sewerage and sewage disposal of a portion of Hinstock village is in hand. The sewage disposal of the village of Cheswardine has been the subject of a special report, and plans are being prepared.

Water Supply.—“ The Market Drayton Water Company furnish an abundant supply of excellent water to Market Drayton, Little Drayton, Betton, and Ridgwardine. The spring for the supply of Norton-in-Hales has been tested for a considerable time and found to be constant and sufficient in quantity.”

Lodging Houses, Bakehouses and Slaughter-houses are regularly inspected.

Dairies, Cowsheds and Milkshops were systematically inspected in 1910—1911, and a note of the defective conditions found were sent to each occupier. Many improvements were made, but much still remains to be done. There are 116 cowkeepers and milksellers on the register.

ELLESMERE (Urban).

<i>Medical Officer of Health</i>	..	..	W. S. SCOTT, M.B., CH.B. EDIN.	
<i>Area in Acres</i>	..	..	..	1,206
<i>Population</i>	at 1911	<i>Census</i>	..	1,946
<i>Number of inhabited houses</i>	..	..	..	454
<i>Number of persons per house</i>	..	..	..	4.3

General Character of the District.

“ The Urban District of Ellesmere is a market town situated in north-west Shropshire, occupying an area of 1,204 acres. The population at the Census of 1911 was 1,946. It is now estimated at 1,960 approximately. The inhabitants are mainly dependent on agriculture, there being no manufactures of any importance.”

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	10.7	.0	.0	.0	.51	1.53	1.02	.0	21.9

Infectious Disease.—Nineteen cases of scarlet fever, 2 of erysipelas, 3 of tuberculosis of the lungs, and 2 of other forms of tuberculosis were notified.

Tuberculosis.—The cases were visited and advice given. In case of death, the bedding was destroyed.

Hospital Accommodation.—"There is no isolation hospital to which cases of infectious disease can be sent. Satisfactory isolation is well nigh impossible in the homes of the poor, and I hope that the time is not far distant when a hospital for isolation and treatment will be provided."

Disinfection.—Disinfection is carried out by the Sanitary Inspector. The Wem steam disinfecting apparatus may be used when necessary.

Water Supply is from the Liverpool mains, laid on to most houses, but others are supplied by standpipes.

River Pollution.—The Tetchill Brook receives the sewage at a point about a mile from the town. A scheme of sewerage and sewage disposal has been selected and forwarded to the Local Government Board.

Excrement Disposal.—There are 4 privies in the town and 16 in the outskirts, the remaining houses have water-closets. "All the larger houses are provided with flush-out water-closets. The remainder are provided with pan closets of a good type, but have no water laid on for flushing purposes. This is a serious defect. The pans in very many cases are allowed to become very dirty, the drains are apt to become choked with paper, and the closets are not flushed out by hand regularly. There is here, a distinct menace to the public health. The remedy is obvious and ought to be applied as soon as possible." No conversions of privies to water closets have been made during the year.

Scavenging.—"No public scavenging is undertaken by the Sanitary Authority. For the most part refuse is tipped into open receptacles. These are periodically emptied on to a refuse heap situated just outside the town. The whole arrangement is bad. The receptacles in many cases are badly built, in some cases there are none, and sanitary refuse bins are seldom to be seen. The cleaning out of receptacles is left entirely to the tenants, and is often irregularly and perfunctorily done. The common refuse heap is, in my opinion, too near the town. The whole system of disposal of refuse should be carefully considered and a scheme of scavenging evolved worthy of the dignity of the town."

Housing.—Six inspections were made under the Housing and Town Planning Act. None were found to be unfit for habitation. There were no cases of overcrowding.

Workshops and Bakehouses.—Twelve have been inspected. There are two underground bakehouses, certified as suitable and regularly inspected.

Dairies, Cowsheds and Milkshops.—There are 8 on the register, and 16 inspections were made. No regulations are in force.

Slaughter-houses.—There are 4 on the register ; frequently inspected and in good sanitary condition. No carcases were condemned for tuberculosis.

ELLESMERE (Rural).

<i>Medical Officer of Health</i>	..	W. S. SCOTT, M.B., CH.B. EDIN.	
<i>Area in Acres</i>	..	..	51,115
<i>Population</i>	at 1911 Census	..	8,365
<i>Number of inhabited houses</i>	..	..	1,752
<i>Number of persons per house</i>	..	..	4.7

General Character of the District.

"The Rural District of Ellesmere comprises an area of 51,115 acres. The district is entirely agricultural. There are a few small villages, the largest of which is Baschurch. The district is for the most part undulating, but some portions are very flat. Nearly all the land is under cultivation, and the subsoil is gravel, with some clay and drift in places. The population at the last Census was 8,365. It is now estimated at 8,488."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	12.4	.11	.0	.35	.70	.47	1.41	72	19.4

Infectious Disease.—Two cases of diphtheria, 29 of scarlet fever, 2 of erysipelas, 14 of phthisis, and 4 of other forms of tuberculosis, were notified. Scarlet fever was wide spread and no common source of infection was discovered.

Tuberculosis.—All cases of tuberculosis are visited on notification, and the patients and relatives instructed.

Disinfection is carried out by the Inspector. The Wem steam disinfecting apparatus can be used when required.

Hospital Isolation.—"There is no isolation hospital in the District, and it is to be hoped that one may be provided in the near future, as isolation of infectious cases is practically impossible in the homes of the poor."

Water Supply.—A supply to Dudleston Heath from the Liverpool main has been completed during the year, and this difficulty is now solved. Cockshutt has an excellent supply. "The water supply to Baschurch by wells is not satisfactory from a sanitary point of view, but this will be remedied when the scheme for the drainage of Baschurch has been completed." The rest of the district is supplied by wells, the quality as a rule being good, but many of the wells are badly constructed and insufficiently protected.

Sewerage and Drainage.—"A new scheme has been adopted for Baschurch, but a difficulty has arisen with regard to the acquisition of the necessary land. A Committee of the Council has the matter under consideration and action will be taken as early as possible under the circumstances."

Closet Accommodation.—Privies are the rule. Pails are being substituted for privies so far as possible.

Scavenging.—No systematic scavenging is possible.

Housing.—Thirty-eight inspections were made during the year. No closing or demolition orders were made.

Workshops and Bakehouses.—There are 9 bakehouses on the register; frequently inspected and in good sanitary condition. None of them are underground.

There are no factories in the district.

Milk Supply.—There are 55 cowkeepers and milksellers on the register, the premises being inspected twice annually. The cowsheds, dairies and milkshops are clean and sanitary, and the conditions of milk supply are good. No regulations are in force.

Meat Inspection.—There are 6 slaughter-houses on the register; inspected frequently. No carcasses or parts of carcasses were condemned for tuberculosis.

LUDLOW (Urban).

<i>Medical Officer of Health</i>	..	..	A. E. WHITE, M.B., D.P.H.	
<i>Area in Acres</i>	..	..	..	420
<i>Population</i>	at 1911	<i>Census</i>	..	5,926
<i>Number of inhabited houses</i>	..	..	..	1,372
<i>Number of persons per house</i>	..	..	..	4.3

Character of the District.

"It is situated on the south-west border of the County, and bounded on the north, south, and west by the rivers Corve and Teme, which form a junction on the western side. The industries of the district are those of a market town, serving the wide agricultural district that surrounds it. In addition, it is, to some extent, a residential place, and is much frequented by visitors on account of its historical interest."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	14.3	.0	1.19	.51	.85	.68	1.02	38	17.9

The birth-rate was the lowest recorded.

The chief causes of death were phthisis 7, cancer 6, pneumonia 4, bronchitis 5, and Bright's disease 5.

Infectious Disease.—Fifteen cases of scarlet fever, 2 of diphtheria, 3 of erysipelas, and 9 of tuberculosis were notified.

There were two small outbreaks of scarlet fever, one of 8 cases in January and February, in which there was no evidence of school infection ; the other, consisting of 7 cases, in October and November, apparently arising from school infection.

Tuberculosis.—Seven cases of pulmonary tuberculosis were notified. “ The majority of the cases were young, and in the incipient stage, and suitable for sanatorium treatment. A large proportion of them were living in houses, which, owing to the dampness or deficiency of ventilation and lighting, must be regarded as detrimental to their disease, and retard their recovery. It seems to me that phthisis is unduly prevalent in the Borough, and that the proportion of deaths to the cases notified is unduly large. I believe it would be advantageous if the cases receiving domiciliary treatment in shelters were treated in the ground of the Smallpox Hospital, and not in the back yards in the centre of the town, where the air is by no means free from dust and smell, and often somewhat stagnant.”

House Accommodation.—One hundred and fifty-nine houses were inspected under the Housing and Town Planning Act, and of these, ten were represented as unfit and closing orders were made in three instances. In 46 houses, the defects were remedied without closing orders. One hundred and two houses are still under consideration, the notices not having been complied with by the owners. “. in the interests of public health an improvement in the standard of cottage property in certain parts of the Borough is necessary, and this can only be brought about by the provision of a certain number of new cottages and the demolition of a number of the worst ones.”

Water Supply—has been satisfactory in quantity and quality. Bacteriological examinations have been made periodically with satisfactory results.

Sewage Disposal.—The works have turned out a satisfactory effluent.

Closet Accommodation.—Thirteen privies have been converted to water-closets during the year. "Although the majority of privies now in existence are situated on the outskirts of the town, their abolition is, I think, very desirable, owing to the nuisance caused by the removal and disposal of the night-soil, and it is desirable that, where they can be dealt with under the 1875 Act, it should be put in force at once, and that subsequently the remainder might be considered with a view to getting them converted under the powers in the Public Health Amendment Act of 1907."

Removal of House Refuse.—Considerable progress has been made in the substitution of galvanised iron receptacles for ashpits. A covering for the scavenging cart is recommended. The tip is free from nuisance and conducted satisfactorily.

Factories and Workshops.—There are 51 places on the register ; 62 visits have been paid.

There are 9 bakehouses. A serious nuisance existed in connection with one due to proximity of stables.

Cowsheds and Dairies.—There are 4 cowsheds in the district. There is a veterinary examination of the cows at regular intervals. The cowsheds are well kept.

Slaughter-houses are in a cleanly condition.

There is no regular inspection of meat. A public abattoir would be a great boon.

LUDLLOW (Rural).

Medical Officer of Health A. E. WHITE, M.B., D.P.H.

<i>Area in Acres</i>	..	..	..	..	..	..	66,348
<i>Population</i>	..	..	..	..	..	..	9,438
<i>Number of inhabited houses</i>	..	..	..	..	..	..	2,057
<i>Number of persons per house</i>	..	..	..	..	..	..	4.6

General Character of the District.

"It lies on the southern border of the County and on the western slopes of the Clec Hills, where it reaches a height of 1,500 feet above sea level. In parts it is very hilly, and the road gradients are often severe. The population is thinly scattered, with an average of one person to six and a half acres. The two most populous centres being the Clec Hill, where many of the quarrymen employed at the various Granite works reside, and Craven Arms, an important railway centre, where large Cattle, Sheep and Horse Sales take place frequently. Except at these two places the district is entirely an agricultural one, with a considerable number of residential estates scattered throughout it.

"There are twenty-two parishes in it, covering 66,350 acres. At the last Census there were 2,003 inhabited houses, giving an average of 4.7 persons per house. I have estimated the population at the middle of the year at 9,420."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	11.1	.10	.21	.21	.42	.63	.63	59	23.1

“The standardized death-rate for Ludlow Rural District is 9.9 and that for Rural England and Wales as a whole 12.1. The most important features in Table III. of causes of deaths at all ages are firstly, the number of deaths from heart disease, namely fourteen; the majority of these were in elderly people and part of the process of senile decay; secondly, the deaths from respiratory diseases numbered twelve, a certain proportion of these associated with influenza; thirdly, infectious disease was responsible for seven deaths. In addition, two deaths were attributable to phthisis, two to other tuberculous disease and six to cancer, which were all below the average of previous years.”

The general and infantile death-rates are both very low and highly satisfactory.

Infectious Disease.—Forty-two cases of scarlet fever, 8 of diphtheria, 5 of erysipelas, 1 of enteric fever, 1 of puerperal fever, 2 of poliomyelitis, 7 of pulmonary tuberculosis, and 5 of other forms of tuberculosis, were notified.

Eight of the cases of scarlet fever occurred in one house and 3 in each of two other houses. Stanton Lacy and Bitterley Schools were closed on account of this disease. “The multiplication of the cases, through the want of proper isolation and efficient nursing was evident throughout the epidemic.” Four cases of scarlet fever with complications were taken into the small-pox hospital.

Eight of the cases of diphtheria occurred in four houses. There were 5 cases in one house, two of which proved fatal.

The case of enteric fever came from Wales whilst suffering from supposed influenza.

There was a third case of poliomyelitis in a neighbouring district, close to the two notified. One of the patients had been in contact with a relative who was suffering from the same disease.

Tuberculosis.—Of the 7 cases of phthisis 3 were in quarrymen. They were all visited and three of them were taken into the Sanatorium. There are about 30 cases of this disease in the district. Dr. White says:—“If it were possible to employ a district nurse for this purpose, the adequate carrying out of open air treatment might be assured, and the necessary disinfection of the room occupied by the patient provided for. Patients are apt to get lax in the precautions which should be taken to prevent the spread of infection, when the duration is so prolonged as many phthisis cases are.”

Water Supply.—It is hoped that the Craven Arms water works will be completed during the present year. The supply of Brand Hill cottages is still under consideration, and efforts have been made to get out a scheme.

Housing Accommodation.—“The amount of inspection seems hardly sufficient for a completion of the work within a reasonable time.” Building is required in certain parts to replace old cottages that have ceased to be fit for habitation.

The Clee Hill is the district most needing houses.

Only one case of overcrowding was reported.

Drainage and Scavenage are on the whole fairly satisfactory, but many improvements to the drainage of the older cottages are required.

The sewage disposal works at Craven Arms are efficient. It is proposed to lay a sewer at Ashford Carbonell, but no alteration has been made to Ashford Bowdler.

Workshops, etc., Bakehouses have been visited and notices served to improve the ventilation and cleanliness.

Dairies and Cowsheds are mostly in good structural condition.

The workshops, 44 in number, have received attention. The majority are wheelwrights' and blacksmiths' shops.

Slaughter-houses are maintained in a clean condition.

By-laws are in force in regard to Slaughter-houses, Dairies, Cowsheds and Milkshops, New Streets and Buildings, Cleansing of Ashpits, Earth Closets, Privies and Cesspools, and also for Nuisances (1903).

NEWPORT (Urban).

Medical Officer of Health M. GEPP, L.R.C.P.E., D.P.H.

<i>Area in Acres</i> .. ..	.. ..	.. ..	.. ..	768
<i>Population</i>	at 1911 Census	.. ..	.. ..	3,250
<i>Number of inhabited houses</i> .. ..	.. ..	.. ..	.. ..	738
<i>Number of persons per house</i> .. ..	.. ..	.. ..	.. ..	4.4

Physical Features and General Character.

"The Urban District is of small area, of rather more than a square mile, lying on the eastern border of the County. It is level in contour, the general elevation being some 250 feet above Ordnance Datum. The natural drainage is to the west, but there is no stream of any importance. The subsoil is the Bunter beds of the new Red Sandstone. The District includes the town of Newport, consisting chiefly of one long and wide street about one mile in length, running north and south, with several narrow lanes and passages and courts running from it at right angles. This part of the town is old and compact, and there is about the centre some crowding of houses upon area. To east and west is open country with extensions of more modern villa residences and artisan cottages along the roads converging on the town, and some outlying collections of houses. Newport is a market and residential town. There is a brewery and a gasworks, and a creamery. The Newport Union Workhouse is within the District."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	10.8	.0	1.53	.0	1.23	.30	1.23	35	17.5

The infantile mortality rate was based on two infant deaths from "natural causes."

Only one case of infectious disease other than tuberculosis was reported. This was a case of erysipelas.

Arrangements are in force for the supply of antitoxin.

Tuberculosis.—Ten cases of pulmonary and 5 of other forms of tuberculosis were notified. There were 5 deaths from pulmonary tuberculosis. The cases were not visited as a rule, but in fatal cases disinfection and inspection of the premises took place.

Hospital Accommodation.—There is a small hospital of a capacity of two beds for each sex. It has proved quite inadequate at times. The district is part of the East Shropshire Joint Hospital District. "The Council's existing hospital might be found suitable for the isolation of advanced cases of consumption, if it be retained."

For small-pox there is an arrangement for the erection of a tent.

Disinfection.—The Sanitary Inspector disinfects rooms with a spraying apparatus. No doubt a steam disinfector will form part of the new hospital equipment.

Water Supply is derived from three wells sunk and bored into the Bunter Beds of the New Red Sandstone. The water is artesian. Most of the water comes from the Walls Head well, which has a boring carried 75 feet into the sandstone and lined for the upper 42 feet with iron. The water is pumped by an oil engine to a covered reservoir holding 152,000 gallons, and giving a head of 150 feet above the centre of the town. The consumption is about 30 gallons per head per day. Bacteriological analysis of the water shows it to be of good quality.

Sewerage and Drainage.—The town is well sewered, and all new sewers have manholes for flushing and surface openings for ventilation. The outfall works consist of a grit chamber and open septic tank, single contact filter and an area of land for irrigation.

Excrement Disposal.—There are 597 water-closets, 18 earth or pail closets and 210 privies. Twenty-seven privies were abolished last year and 119 privies have been abolished in the past five years.

Scavenging.—The scavenging of privies and removal of house refuse is undertaken by the Council. A very small number of ash-pits remain in use, otherwise an ashbin system with weekly removal is uniform.

Housing.—Some of the occupied houses are barely fit for human habitation. "The amount of housing accommodation appears to be fairly adequate to the population, but in the essentials of healthy habitation there is much that is seriously lacking."

"The records of inspection in the District are kept on loose sheets, and considered by the Sanitary Committee at their ordinary meeting."

"Little progress has so far been made in the use of this inspection to bring about effective improvement in the condition of house property. Ninety-five houses have been inspected and reported on in the past three years, of which 64 still 'remained under consideration' at the end of last year. I have nothing to add to the recommendations I have already made in the matter."

Permissive Powers.—The Public Health Acts (Amendment) Act, 1890, Part III., and the Infectious Disease (Prevention) Act, 1890, have been adopted, also Parts II., III., IV. (Secs. 52 to 56, and 58), and Part V. of the Public Health Acts Amendment Act, 1907.

By-laws are in force in respect to nuisances, new streets and buildings, slaughter-houses, and common lodging houses.

Slaughter-houses.—There are 9 on the register ; visited regularly and at times of slaughtering.

Tuberculous carcasses or parts were found in 18 cases. The Council has engaged a veterinary surgeon as a consultant.

Three knackers' licences have been issued by the Council. No infringements of the Knackers Act came under notice.

Common Lodging Houses—three ; kept in accordance with the by-laws.

Dairies, Cowsheds and Milkshops.—Regulations are in force. The number of dairies, etc., on the register is 27. They are inspected periodically.

Bakehouses.—There are 8 on the register, including one underground ; found in good order on inspection.

NEWPORT (Rural).

Medical Officer of Health M. GEPP, L.R.C.P.E., D.P.H.

<i>Area in Acres</i>	..	..	..	..	..	..	22,808
<i>Population</i>	at 1911	<i>Census</i>	..	..	..	..	6,005
<i>Number of inhabited houses</i>	..	..	..	..	..	..	1,306
<i>Number of persons per house</i>	..	..	..	..	..	..	4.6

General Character of the District.

" The District is in part agricultural and part industrial, and lies within the eastern border of the County. The northern and large part is on the Shropshire plain, here formed of the Bunter beds of the new Red Sandstone, and is entirely agricultural. The elevation of this part varies from 150 to 300 feet above Ordnance Datum. The southern and much smaller part rises rather rapidly from the plain, reaching some 500 feet elevation at the extreme border on the south, and comprises the apex of the extensive triangular coal-field, which has its base some miles to the south. This part lies upon the coal measures, with a small intrusive outcrop of much broken older strata, forming Lilleshall Hill. The natural drainage is by various small streams from the south and east flowing towards the west, and falling into the Tern river outside the district.

" There are nine parishes in the District, all agricultural, except the large parish of Lilleshall, which is in part agricultural, but also contains the industrial area of Donnington Wood, several collieries and some engineering and other ironworks, employing the majority of the workers in this area."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	13.0	.83	.33	.16	1.33	.33	.50	136	20.8

The infant mortality was exceptionally high, following two years of low mortality. This high rate was due to an increase in diarrhoeal disease and to deaths of infants prematurely born or congenitally weak. Speaking of the causes of infant deaths, Dr. Gepp says :—" The majority of these causes may be considered preventable, and such as a system of health visiting under the adoption of the Notification of Births Act, should do much to lessen."

" A system of instruction of mothers in the feeding and care of infants is desirable in the District."

Infectious Disease.—Seventeen cases of scarlet fever, one of diphtheria and one of puerperal fever were notified.

The seventeen cases of scarlet fever occurred in 9 families. A localised outbreak of 4 cases occurred at Tibberton in September. The origin was obscure, but it was probably due to some unrecognised case. The outbreak ceased after closure of the school.

Diphtheria Antitoxin Order.—Arrangements have been made for a chemist in Newport to hold a stock of antitoxin for free distribution to medical men in cases of the poorer class.

Tuberculosis.—Eleven cases of pulmonary tuberculosis and 3 of other forms were notified. There were 2 deaths from pulmonary tuberculosis. Five patients were treated in the Shropshire Sanatorium.

Hospital Isolation.—There is no isolation hospital for the use of the district, but there is an agreement for a tent hospital along with Newport Rural and Gnosall authorities. A Joint Hospital District has now been formed.

Disinfection.—The Sanitary Inspector disinfects infected rooms in all notified cases with a spray apparatus. There is no steam disinfecter.

Water Supply.—Seven hundred of the houses are supplied by public or private mains and 607 by private wells and springs.

Church Aston and Chetwynd Aston villages are supplied from the Newport Urban Council's supply. " Lilleshall village, together with Muxton, Donnington, and the industrial area of Donnington Wood, all in the Lilleshall parish, are supplied by the works and mains of the Duke of Sutherland. Water is raised from a well sunk in the Bunter measures below Lilleshall village, on the north side, by a wind engine to reservoirs on Lilleshall Hill. The site of the well is at a safe distance from occupied dwellings. The two reservoirs hold 404,000 gallons. The completion of this system by its extension to include the populous area of Donnington Wood, in 1909, was a great gain and advance in the district's sanitation. Some of the houses on the higher levels of Donnington Wood are supplied by an extension of the Duke of Sutherland's Hilton well system, which supplies the adjoining Urban District of Oakengates. 264 out of 271 houses leased by the Lilleshall Co. are supplied. In all, some 504 houses, out of 597 in the parish, are supplied from the main."

Tibberton is supplied from a well outside the village, water being raised by a wind engine.

Edgmond village is supplied from a well in the sandstone, water being raised by a wind engine to a reservoir. The water is connected to several houses and to a public fountain.

Elsewhere the district is supplied from pumps and wells.

"As I have often pointed out the re-construction and protection of existing wells, provided the sanitary surroundings are reasonably good, would often result in greatly improving the safety of the supply, and can, as a rule, be enforced by the Council under the limits of cost irrecoverable under the powers of the Public Health (Water) Act, 1878."

Sewerage and Drainage.—In Edgmond village most of the houses are drained into one or other of the four sewers which have separate outfalls on the land.

The drainage of Donnington Wood was greatly improved in 1905 by a system of combined drainage.

Excrement Disposal.—There are 39 water-closets, 90 earth or pail closets and 1,060 privies in the district. Some 20 pail closets were substituted for privies chiefly on the Lilleshall Company's and Church Aston estates.

Housing is on the whole fair in the agricultural district, but in the industrial area of Donnington Wood there are many houses of an unsatisfactory type.

Good work has been done by the Lilleshall Company during the year, particularly to property lying between the Granville Colliery and the Rookery. A considerable amount of work has also been done on the Church Aston estate.

Overcrowding.—"The total number of tenements with more than two persons per room in the District is given as 101, with a population of 819 persons, giving a percentage of 13.7 persons in private families in the District as 'overcrowded,' the corresponding percentage in Shropshire Rural Districts being 7.7, and 6.5 in the Rural Districts of England and Wales generally.

"There is clearly a case for investigation and action here in connection with the Housing inspection. The percentage of 'overcrowded' families is high, and from the above figures gross cases appear to be somewhat numerous, as where 5, 6, and 7 persons occupy a one-bedroomed tenement, and 9, 10, and 11 or more occupy houses with two bedrooms. The Inspector reports that houses with 3 or more bedrooms are much needed in the Donnington Wood area, in order to make it practicable to remedy overcrowding, of which he has found and reported a number of instances in recent years.

"No new houses were erected in the District during the year. Having regard to the foregoing evidence as to deficient house room accommodation, and to the fact that old cottage property tends to decay and become unfit for habitation, while little or no new building takes place, it would be well in my opinion for the Council to consider seriously their powers and duties as to providing houses for the working classes."

Permissive Powers.—The Public Health Acts (Amendment) Acts, 1890 and 1907, and the Infectious Disease (Prevention) Act, 1890, are not adopted in the District.

No by-laws have been made.

The adoption of Building By-laws is recommended.

Slaughter-houses.—There are 3 in the District ; visited frequently at times of slaughtering.

No tuberculous carcases were found.

Dairies, Cowsheds, and Milkshops.—Regulations are in force.

Bakehouses—two on the register ; inspected periodically.

OAKENGATES (Urban).

Medical Officer of Health A. E. WHITE, M.B., D.P.H.

<i>Area in Acres</i> .. ..	.. ..	2,329
<i>Population</i>	at 1911 Census	11,744
<i>Number of inhabited houses</i> .. ..	.. ..	2,466
<i>Number of persons per house</i> .. ..	.. ..	4.7

General Character of the District.

"The District was formed in 1898 out of adjacent parts of three neighbouring rural districts, to secure more efficient Sanitary Administration.

"It is largely an industrial one, due to the extensive ironworks and one or two coalpits in the neighbourhood. It is naturally hilly in contour, and has scattered over the south and east portions large pit mounds, so that land suitable for building purposes is not very plentiful in these Districts.

"The surface levels vary considerably, in the south-east where the coal measures rise up it reaches nearly 600 feet O.D., and in the north, which is on the Shropshire plain, it sinks to about 200 feet O.D., and overlies the Bunter beds of new Red Sandstone covered with drift. The District covers an area of 2,329 acres, and the houses are scattered throughout it, which makes the sewerage and laying of water mains difficult and expensive."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	11.3	.75	.42	.25	1.51	.67	1.34	94	23.9

"Infective enteritis was again a marked feature of the returns, and I'm afraid will continue to be so, until there is a large diminution of the big open ashpit and privy pits."

Infantile Mortality.—"Diarrhoea and enteritis were responsible for six, and the prevalence of this disease must be regarded as one of the results of imperfect sanitation."

"The study of Table 2 makes it evident that many of these deaths were preventable, and the appointment of a Health Visitor, and Lectures to Mothers on the rearing of infants, would, I believe, be beneficial to the District."

Infectious Disease.—Twenty cases of diphtheria, 4 of erysipelas, 4 of scarlet fever, 5 of phthisis, and 1 of other forms of tuberculosis were notified.

Diphtheria occurred principally in November and December, and there was little evidence of school attendance being the cause of the spread. There was also little evidence that school attendance was the cause of spread of scarlet fever.

Tuberculosis.—All the cases of pulmonary tuberculosis were visited; 3 were removed to the sanatorium. There were 4 deaths from phthisis in the district during the year.

House Accommodation.—One hundred and thirty-two houses were inspected under the Housing and Town Planning Act, and 8 of these were represented as unfit for habitation and closing orders made. In 45 houses the defects found were remedied. Only 8 cottages were erected during the year. “The building of houses by the private individual is very spasmodic, and in a district which is steadily growing, it fails to meet the demand by a long way. When to this is added the fact that many of the existing cottages are of such an age, that their repairs involves the re-building of them, and the owners prefer in many instances to close and demolish them, it will be seen that the position is one that can only be met by the Council undertaking to provide additional housing accommodation. Cases of overcrowding are of frequent occurrence and most difficult to deal with without penalising tenants for a condition of things for which they are not responsible, viz., the absence of alternative dwellings.”

Sewerage and Drainage.—A large amount of work was done during the year in improving the drainage of the district. Many serious nuisances will have to be dealt with when the new sewers are completed. “Three thousand yards of sewers were laid in 1913, and the completion of the work now being carried out will be of great benefit in making the conversion of a large number of privies possible.”

“The treatment of sewage will be much facilitated by the underdraining and the additional carriers which are part of the new scheme.”

Water Supply.—“Twenty-one houses, new and old, have been connected with the main, and as the private supplies recently analysed invariably show them to be unfit for drinking purposes, the remainder of the owners within reach of the mains should be compelled to connect.

“There has been some deficiency of pressure in the higher part of the District again this year; it is a serious matter where owners have put in water-closets, and steps should be taken to get the Duke of Sutherland to provide a remedy that would prevent a recurrence of this nuisance.”

Scavenging.—“There have been very few conversions of privies into water-closets during the year, and many of the notices served for this purpose have been disregarded by owners. Both from an economic and as well as a sanitary point of view the abolition of large numbers of these privy pits is required, and the Council should exercise their powers to the fullest extent to bring this about.”

“A number of large ashpits have been dealt with during the year, but the substitution of covered galvanised bins does not make much headway. This is the only satisfactory method of storing ashes and refuse and make the collection more expeditious. The emptying of large open ashpits can only be undertaken at considerable intervals, and in the meantime there is often a foul and decomposing mass of organic matter in close proximity to the dwellings, and all the essential conditions for the production of Infantile Diarrhoea and other diseases are present.”

The tar spraying of the roads is advocated for the prevention of dust nuisance.

Inspection of Meat and Slaughter-houses.—The slaughter-houses are visited when killing is taking place, and the meat at the market on Saturday night carefully watched.

Cowsheds, Dairies and Milkshops.—“Several improvements have been carried out in a number of sheds during the year, and one only now requires to be dealt with. The structural condition of the sheds may now be regarded as satisfactory.”

Factories and Workshops.—There are 16 factories and 87 workshops on the register ; visited regularly.

Permissive Powers.—The Public Health Acts Amendment Acts of 1890 and 1907 have been adopted as far as applicable to the District. There are by-laws in relation to new streets and buildings, slaughter-houses, and dairies and cowsheds.

OSWESTRY (Urban).

<i>Medical Officer of Health</i>	..	R. DE LA POER BERESFORD, B.A., M.D.					
<i>Area in Acres</i>	..	..	..	..	..	..	1,887
<i>Population</i>		at 1911 Census	..	..	..	..	9,991
<i>Number of inhabited houses</i>		..	..	..	..	..	2,320
<i>Number of persons per house</i>		..	..	..	..	..	4.3

General Character of the District.

"Oswestry is situated on land sloping to the south and east, at an elevation of over 400 feet above sea level. Subsoil, gravel, marl and clay in patches. Two streams at least run through the town. There are many wells in the town, some furnishing pure but hard water. The thorough drainage of the town, the gradual removal of ancient sources of contamination, the paving of the yards, the daily removal of refuse, all tend to purify and dry the subsoil, and so make the water of the wells of a better quality."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	15.2	.0	.70	.50	.50	1.70	1.90	88	21.4

The birth and death rates show slight increases on the previous year.

More than 30 per cent. of the illegitimate children died in the first year of life.

Infectious Disease.—There were 10 cases of diphtheria, 4 of erysipelas, 28 of scarlet fever, and 32 of tuberculosis notified.

The scarlet fever outbreak was largely a continuation of the outbreak in 1912. The cases were extremely mild.

The spread of diphtheria was principally due to carriers. Dr. Beresford was struck with the number of children with enlarged tonsils who were carriers.

In all cases of infectious disease, the houses are visited, instructions given, and careful inquiries made. The schools are also visited. Disinfection is carried out at the termination of a case.

Every case of tuberculosis is visited by the Medical Officer of Health, and the sanitary condition of the house dealt with by the Sanitary Inspector. Disinfection is always carried out after death.

Water Supply has been abundant except for a short period, when the Liverpool water was used.

"Works have now commenced for the construction of an additional water main from Rhydygroesau that will bring the water over the Racecourse hill, from our big reservoir in larger volume, so that we may utilize water often running to waste over the dam at Penygwely."

The water is frequently examined.

There is no river pollution.

Scavenage.—There is a daily collection of refuse.

The newly constructed sewage works are a great success.

The schools have been frequently visited and were found to be clean. Improvements have been made to the Council school.

"We are hoping to arrange a meeting with the neighbouring Authorities to try and find means to carry out the medical treatment of school children, as the result of the examination of the School Medical Officer. These cases need following up if we want the rising generation to be an asset instead of a liability to the nation."

The *Bakehouses* have been visited. There is some room for improvement in the small ones.

The Veterinary Inspector reports on the cows whose milk is brought into the Borough every six months. Samples of milk are examined by the Sanitary Inspector for quality and cleanliness. There has been much improvement in the latter respect.

Houses.—There is sufficient accommodation now for the working classes.

The Borough Surveyor is assisted in his work as sanitary inspector by the Deputy Surveyor.

Midwives who practice in the Borough are all certified and competent.

OSWESTRY (Rural).

Medical Officer of Health .. R. DE LA P. BERESFORD, B.A., M.D.

<i>Area in Acres</i>	..	..	..	..	..	60,366
<i>Population</i>	at 1911 Census	..	..	..	..	15,443
<i>Number of inhabited houses</i>	..	..	..	..	..	3,450
<i>Number of persons per house</i>	..	..	..	..	..	4.5

General Character of the District.

"Roughly speaking, the District, which extends over 62,000 acres, is greatly diversified in its physical features, contour, and subsoil. It slopes from very high ground in the north and west towards the Shropshire plain. It is bounded on the north side by the Ceiriog, a tributary of the Dee, on the south by the Vyrnwy and the Tanat tributaries of the Severn, and by the latter river itself, a line passing through the northern parts of the district divides the watersheds of the Dee and the Severn. With the exception of the St. Martin's portion, the district may be described as agricultural. In St. Martin's the adjoining collieries give employment to a very large number of men, who, for want of sufficient accommodation nearer their work, cross the borders of our district, some even finding their way into the town of Oswestry. Towards the south and west of the district are to be found several large limestone quarries, and many men are engaged there in the manufacture of lime and dolomite."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	12.5	.25	.45	.19	.71	.96	.90	68	23.4

Infectious Disease.—Five cases of diphtheria, 45 of scarlet fever, 3 of erysipelas, 26 of phthisis, and 6 of other forms of tuberculosis were notified.

Every case of tuberculosis is visited and directions for disinfection and isolation given.

Disinfection is carried out by means of formaldehyde spraying and fumigation, and a thorough cleansing of the premises.

Water Supply.—The efforts of the Committee are directed to the extension of the water supplies and improvement of the wells.

River Pollution.—The Oswestry and Weston Rhyn sewage works give satisfactory effluents.

Scavenging.—An organised system of scavenging for the larger districts would be a great benefit.

The necessity for providing a larger space in connection with houses in the country for the purposes of sewage and refuse disposal is pointed out. A third of an acre is suggested for each house.

The work under the Housing and Town Planning Act is considered satisfactory.

On the whole there is sufficient housing accommodation, though some of the houses are unsatisfactory.

The sanitary condition of the schools is satisfactory. Many recent improvements are pointed out. The notification of infectious disease by the teachers is prompt.

The *Dairies and Cowsheds* are kept clean.

There are 12 slaughter-houses on the register.

Factories, Workshops and Bakehouses are regularly inspected.

SHIFNAL (Rural).

Medical Officer of Health A. E. WHITE, M.B., D.P.H.

<i>Area in Acres</i>	..	..	..	..	..	..	45,377
<i>Population</i>	at 1911	<i>Census</i>	..	..	..	..	8,953
<i>Number of inhabited houses</i>	..	..	..	..	..	..	2,042
<i>Number of persons per house</i>	..	..	..	..	..	..	4.4

General Character of the District.

"It has an area of 45,380 acres; two parishes situated in the County of Stafford are included in the district for sanitary purposes. The population is for the most part thinly scattered, with an average density of one person to five acres. There are sixteen parishes, all of them, excluding portions of Shifnal and Albrighton, being strictly rural.

It overlies the new Red Sandstone, with coal measures on the extreme western boundary.

Shifnal is the market town and Albrighton a large residential village.

The chief industry of the district is agriculture, but there are in addition, two coal-pits, the workers in which mostly reside in the neighbouring district; a wire works, and a chemical works.

A considerable number of large residential estates are scattered through the district.

The Public Institutions in the district include the Workhouse, a Cottage Hospital and a joint Isolation Hospital for small-pox."

Statistics.

Period	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	11.4	.11	.66	.22	.77	.66	1.0	67	18.1

Referring to the infantile mortality, Dr. White says :—" The chief features of the Table IV. showing these returns are, firstly, the prominent position of tuberculosis ; secondly, the deaths from respiratory diseases, mainly due to want of care of children suffering from measles ; and thirdly, the deaths due to congenital conditions, the result often of want of attention to the health of the mother during pregnancy."

Infectious Disease.—Fourteen cases of diphtheria, 19 of scarlet fever, 11 of phthisis, one of other forms of tuberculosis, and one of ophthalmia neonatorum were notified.

The greater portion of the diphtheria cases occurred in Shifnal in November and December, the school being responsible for some of the spread. On swabbing a considerable number of the children, two were reported as positive.

The scarlet fever cases were scattered over a considerable area, and were of a mild type.

Tuberculosis.—Eleven cases of phthisis were notified. Two of these died during the year and 2 were removed to the Sanatorium. All the cases were visited. In one case the house was overcrowded and unsuitable. The houses are disinfected after death. A suggestion is made that the Council should provide 2 shelters for use in suitable cases.

Non-notifiable Disease.—Influenza, measles, chicken-pox, German measles, and mumps were prevalent during the year at one time or another.

Housing Conditions.—Fifty-four houses were examined under the Housing and Town Planning Act. Two were represented as unfit for habitation and were closed by the Council. In 26, the defects were remedied by the owners and 18 are under consideration. The house accommodation on the whole is sufficient for the population.

Water Supply.—Action has been taken in 4 cases where the water was of a bad quality. Speaking generally, the cottages are well supplied with water.

Sewage and Drainage.—The Shifnal outfall works have been maintained in a satisfactory condition. At Albrighton, the new sewage works are nearly completed, and they will make possible much improvement in drainage and conversion of privies.

Nineteen privies were converted to water-closets during the year.

Scavenging is carried out by the tenant except at Shifnal, where a half-yearly contract is made.

Portable galvanised ash receptacles are recommended to re-place the large open ashpits.

Dairies, Cowsheds and Milkshops.—There are 42 cowkeepers on the register. The premises have been visited frequently and no structural defects were found. " To be certain of producing clean milk, two other conditions are essential, viz. :—the cleanliness of the milker and of the cows, and in order to bring this about, examinations of milk are now made for dirt, and where it is found in undue proportion, a caution is issued to the farmer. A second offence may be followed by summons under the Food and Drugs Act."

Slaughter-houses are constantly visited and the carcasses carefully examined. Three beasts and 14 sheep were condemned during the year.

Factories and Workshops.—There are 4 factories and 30 workshops on the register. Few complaints have arisen in connection with them.

Permissive Powers.—"The Infectious Disease Act and parts of the 1890 Amendment Act are in force. There are by-laws for cowsheds, dairies, and milkshops, and for new buildings, slaughter-houses, lodging houses and nuisances, September, 1902.

"The Council propose to revise the building by-laws."

SHREWSBURY (Urban).

<i>Medical Officer of Health</i>	..	..	THOMAS ORR, M.D., D.S.C.
<i>Area in Acres</i>	..	..	.. 3,525
<i>Population</i>	at 1911 Census	..	.. 29,389
<i>Number of inhabited houses</i>	..	..	.. 6,612
<i>Number of persons per house</i>	..	..	.. 4.4

Physical Features and General Character of the District.

"The Borough comprises 3,470 acres, forming an area nearly equal in length and breadth, and roughly quadrangular. This area lies in the valley of the Severn, having a gradual fall to the river, and varying in elevation from 150 feet to 260 feet above sea level. The geological formation is varied, the Permian Red Sandstone occurring in a band across the centre, with the Bunter beds of the new Red Sandstone to the north, and the coal measures to the south. The actual subsoil is, however, mainly river drift, of varying and generally considerable thickness. In places stiff clay, but generally sandy and dry in the upper part, with clay underlying at greater or less depth. The contour offers good natural drainage to the Severn, which owing to its devious course, flows over a length of some eight miles either through or along the borders of the district.

"The climate of Shrewsbury is mild and possesses the characteristics of a valley climate. The open nature of the valley and the varied contours of the town, together with the course and movement of the Severn through and around the town, prevent stagnation of the air; and river fogs, even in the low lying parts of the town, are neither so frequent nor so common as might be expected.

"The old town of Shrewsbury stands on two hills of generally moderate ascent, but steep in parts. It is nearly surrounded by the river, which here makes a horse-shoe curve some two miles round with a width across the neck of about 400 yards.

"The enclosed part is most densely built on. Of the various suburbs across the river, Frankwell forms an old settlement on the north-west, with modern extensions chiefly of villa residences, along the main roads radiating from it; Kingsland is a modern residential suburb to the south-west; Coleham an old settlement to the south-east, with Belle Vue, a modern extension adjoining; Abbey Foregate, old near the river, modern and residential further out, lies to the east.

"To the north-east, on the low lying ground outside the neck of the peninsula is the considerable district of Castle Fields, built over for the most part some fifty or sixty years ago, and forming an artisan residential quarter."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	13.1	.40	.77	.17	1.38	.87	1.55	74	20.7

Infectious Disease.—One hundred and ten cases of diphtheria, 85 of scarlet fever, 9 of erysipelas, 2 of enteric fever, 6 of ophthalmia neonatorum, and 1 of poliomyelitis were notified.

Scarlet Fever.—Ninety-three persons were removed to the Isolation Hospital. The disease was spread to a considerable extent through missed cases in schools. The cases were generally of a mild character.

Diphtheria.—The disease was prevalent throughout the year with an excess in the months of June, July and November, the total number of cases notified up to the end of November being 101. Eighty per cent. of the cases were under 15 years of age, and 61 per cent. were school children. About 74 per cent. of the school children attacked belonged to two schools. These two schools are closely associated, the spread from one to the other being readily explainable. Apart from school infection, Dr. Orr says:—"The habits of the people have undoubtedly tended towards the spread of the disease. It is a frequent occurrence to have the patient nursed in the living room where the older members of the family live during the day and take their meals, the members of the family being allowed to play with the patient freely, while neighbourly persons go in freely to discuss the character of the disease and its treatment before a doctor is called in."

The prevalence of sore throat in the early summer is given as a cause predisposing to the infection and development of diphtheria.

The measures taken for the prevention of diphtheria were:—(i) swabs for bacteriological examination were taken by the medical Officer of Health or School Nurse from all cases of sore throat at school, or amongst absentees from school unless under medical treatment. This is done as a routine measure apart from epidemics. (ii) A memorandum was sent to the head teachers of the schools recommending special vigilance with regard to sore throats. (iii) In the event of the occurrence of more than one case of diphtheria at a school, that school was visited frequently by the School-nurse or Medical Officer of Health, and all absentees without medical attendance and not definitely accounted for, were visited and throats swabbed if necessary. (iv) Owing to the evident implication of St. Michael's Infant School, all the children at this School (101), and the absentees (40), were swabbed without one positive result. (v) The school was closed for five weeks. (vi) The school was disinfected with formalin spray, the books, pencils, etc., burned, and the drains overhauled. Only two cases occurred in this school after this action. (vii) Other schools implicated were dealt with without closure. (viii) Eighty-five out of the 101 cases were removed to the Isolation Hospital; to make room for them the scarlet fever cases were transferred to the small-pox hospital. (ix) Cases at the hospital were not discharged until three successive negative swabs had been obtained, and in cases nursed at home, disinfection was not carried out, until two successive negative swabs had been obtained.

Dr. Orr points to the good results following hospital isolation; he also suggests that the low mortality during the last five months (4 per cent.), compared with that during the first six months (20 per cent), may be due to the early discovery of cases on account of the special measures taken in the latter period.

Enteric Fever.—The two cases were undoubtedly imported. There has only been one case, a doubtful one, since 1909 up to the present year.

The cases of *ophthalmia neonatorum* are kept under supervision by the Health Visitor, and as a rule the cases are taken to the Eye, Ear and Throat Hospital.

One case of *acute poliomyelitis* was notified and no further cases occurred.

Tuberculosis.—There were 42 cases of pulmonary and 25 of other forms of tuberculosis notified. There were 23 deaths from pulmonary and 5 from other forms of tuberculosis. The cases were frequently visited by the Health Visitor and in addition, 599 visits were paid to cases under observation at the end of 1912. The total number of visits paid was 921.

“The health visitor provides the patients with leaflets of instructions, teaches the patients to take their temperature and generally advises them as to open-air treatment and the prevention of infection. Sputum flasks are provided for patients who cannot afford to pay for them, and during the year they were provided for 23 cases.”

The Council has provided four phthisis shelters. They were used during the year by 7 patients. More shelters would be provided but there is no suitable site connected with most of the houses. After notification the house is visited by an Inspector, who investigates the sanitary condition and tests the drains. Disinfection is offered.

A tuberculosis exhibition was held in connection with the Association for the Prevention of Consumption. It was attended by 12,225 persons, including 2,009 children from schools in the Borough.

Diarrhoea.—The death-rate from diarrhoea of persons under 2 years of age was 17.88 per 1000 births, and was about four times that of 1912. This is accounted for by the hot summer and autumn.

“In spite of the very hot summer and autumn the rate for 1913 compares very favourably with previous years. There can be no question that the rate has been prevented from rising to the extent to which it did in previous hot years by the sanitary improvements accomplished in the town, by the supervision of the collection of refuse, and by the instruction given to mothers by the Health Visitors. Another factor contributing to the low death-rate from diarrhoea is the absence of privies and privy middens in the town.”

Infantile Mortality.—The infant death-rate was 74 per 1000 births. The chief causes of death were diarrhoeal diseases, premature birth, atrophy, debility and marasmus and convulsions. The adoption of the Notification of Births Act has been of the greatest value.

During the year 614 births were notified, including 26 still-births. There was failure to notify in 14 cases. By far the majority of the cases were notified by midwives.

Health Visitor's Work.—“Since the adoption of the Act, and the appointment of a health visitor in 1909, the infant mortality has shown a progressive reduction, and the reduction is all the more evident when the rate is compared with that for England and Wales.”

“One cannot put the reduction in the mortality down entirely to the education through health visiting, as great sanitary improvements have been effected during these years, yet there can be little question of the great influence of health visiting in reducing the infant death-rate.”

Eighty-nine per cent. of the births notified were visited at least once, and in most cases a visit was paid every three months, but in some cases oftener. In all, 5,100 visits to infants by the staff were made during the year. 82.4 per cent. of the children were found to be breast-fed at the first visit. Out of the 44 deaths investigated it was found that 24 of the children had been artificially fed.

School for Mothers Committee.—"The work of the Committee now consists in conducting the School for Mothers in association with the Public Health Department, in managing sand-gardens for children in different parts of the town, in providing help for weakly children whose parents are in poor circumstances, and in organising a Baby Show annually."

The School for Mothers' meetings are held once a week in the afternoon, the school nurse and health visitor acting as organisers. Advice is given to mothers and demonstrations on making of clothes and cooking of food.

Water Supply.—There is a dual supply ; for drinking, well water of great chemical and bacteriological purity and of about 20 degrees of hardness, is used.

"The second supply is obtained from the river, whence it is pumped through pressure filters to a supply reservoir, which supplies the town. The filters clarify the water, and, as shown by previous experiments, take out a large proportion of the bacteria. There being no storage and the whole of the organisms not being filtered out of the water the result is not a potable water, but one which is eminently suitable for washing and sanitary purposes. To avoid danger of disease should this water be drunk accidentally—but it must be remarked that discouragement against drinking it is always given—it is treated after filtration by one part in 2,000,000 of chlorine in the form of "Chloros," which kills off any dangerous organisms which may be present. Repeated examinations have shown the absence of intestinal organisms in one litre of water.

"Without going into the merits or demerits of such a system, it may be asserted that the supply as it is, and as long as it is kept under supervision, is a safe supply."

Pollution of Rivers.—Several sources of pollution of the river Severn were found and dealt with in the year.

Drainage and Sewerage.—"House-to-house inspection during the last four years under the Housing Acts has shown the very defective condition of the drains of most of the working-class dwellings in the town. As a result of house-to-house surveying 462 houses were found to have defective drains. Of these, 113 have been re-drained, while the drains in connection with 311 are either in course of construction or the reconstruction has been promised." In all, 410 houses were completely re-drained in 1913 under the supervision of the Inspectors.

The Borough is provided with sewers with the exception of two small areas, on which stand 7 and 15 houses respectively. These houses have dry-earth closets and cesspits for slop water.

Sewage Disposal Works.—No change has taken place in the treatment of the sewage at the outfall works. The sludge should be pressed into cake so far as possible.

Closet Accommodation.—Water carriage is universal with the exception of the two small areas above mentioned. The closets are mostly of the wash-down type, composed of two pieces.

"Generally speaking, among working-class houses, one closet is provided for each two houses, but in many cases one closet exists for each house. When more than two houses use one closet another is required, the rule being adopted of allowing not more than two houses to one closet."

Scavenging.—"The collection of refuse calls for much improvement, properly covered refuse carts being necessary." The occupiers and scavengers should be forbidden to empty refuse on the roadways. Notices were served during the year for the provision of refuse receptacles at 651 houses.

There are three tips ; well maintained but still a constant source of nuisance. " To have such extensive breeding grounds for flies in the centre of inhabited areas is to cultivate potent means for the spread of disease. The erection of a destructor is not only urgently required, but it is a pressing duty of the Council."

Premises and Occupations which can be controlled by By-laws or Regulations.—*Common Lodging Houses.*—There are 4 of these houses. They are now in good sanitary conditions and appear to be well conducted.

Houses Let in Lodgings.—The adoption of by-laws is urged.

Offensive Trades.—Five places in which offensive trades are conducted are registered. Considerable alterations were made to prevent nuisance. An Order has been issued by the Local Government Board declaring certain trades, including fried-fish shops, as offensive other than those mentioned under sec. 112 of the Public Health Act. By this Order no person can establish one of these trades without the consent in writing of the Local Authority.

Food.—Milk Supply.—At the beginning of the year, there were 35 cowkeepers and milk-sellers on the register. Three of the cowsheds have been given up owing to serious sanitary defects. Thirteen samples of milk were examined for the presence of tubercle bacilli, and one was found to contain tubercle bacilli. Information was sent to the County Medical Officer of Health and the cows were examined by the County Veterinary Inspector.

Dirt in Milk.—The thirteen samples were all examined for dirt and one showed an excess. The retailer was warned and the County Medical Officer was notified. A further sample taken later was satisfactory.

Other Foods.—The abattoir superintendent is the Inspector of Meat, and the Nuisance Inspectors inspect other places where food is sold or prepared.

Public Abattoir.—During the year 1,332 beasts were slaughtered in the public abattoir. Of these, 14 were found more or less affected with tuberculosis. In 8 of these, the whole carcass was destroyed, and in the remainder, the diseased parts. A considerable number of other animals were dealt with on account of diseases or parasitic conditions. Of 7,791 sheep and lambs slaughtered, 5 were found to be unfit for human food. Of 3,906 pigs slaughtered, 85 were found to be affected with tuberculosis. Thirty of these carcasses were destroyed as unfit for food, and in the remainder, the affected parts were destroyed.

Private Slaughter-houses.—There are only 5 private slaughter-houses in the Borough. These are well conducted, but their situation renders meat inspection difficult. It is estimated that 600 beasts, 4,600 sheep and lambs, 300 calves and 300 pigs were slaughtered. Two carcasses of cows were condemned on account of tuberculosis and a part of another beast.

Administrative action taken with regard to tuberculous animals.—When a tuberculous animal is found at the abattoir, inquiries are made as to the farm from which it has come, and if successful, and if the animal has come from within the County particulars are forwarded to the County Medical Officer of Health.

Sale of Food and Drugs.—During the year, 71 formal and 14 informal samples were taken. Two formal samples and one informal, in each case milk, were found adulterated. Proceedings were not taken in any case.

Milk and Cream Regulations, 1912.—Under these regulations, 41 samples of milk were taken. In none of them was there any preservative. No samples of cream were taken.

Housing.—A scheme for the erection of 63 houses in the Ditherington Ward is in hand, and it is hoped to secure early completion.

“The continued scarcity of houses has prevented the closure of any in 1913.”

Four hundred and twenty-one houses have been inspected under the Housing Regulations, 1910, and 2,430 defects were found. The total number of notices served was 380. “Many of these houses were of the back-to-back type, in which it is impossible to remedy the defects without making each pair of back-to-back houses into one house. This has been done in many cases.”

“At present, exception is taken to more than two families being allotted to one w.c., but it is highly desirable in order to preserve the ordinary decencies of living that one w.c. should be provided for each house.”

“Probably no improvement is more appreciated by the tenants than the paving of the yard, which is thus rendered easily cleansable.”

Only 15 out of the 421 houses had a proper receptacle for ashes. Of the houses surveyed, 347 were found to be without scullery sinks and 361 without a food store. Forty-six of the houses were found to be overcrowded, most of these being in three-roomed houses. The rental is very high for the accommodation provided.

Workshops. Workplaces, etc.—Four hundred and eighty-two inspections were made and 31 written notices served. The bakehouses are kept under close supervision. “The general condition of the workshops in the Borough is very good, which result may be put down to the particular survey of these places made in 1913, when every workshop was thoroughly overhauled and put into good sanitary condition.”

Hospital Accommodation.—Eighty cases of scarlet fever and 100 of diphtheria were admitted during the year.

Scarlet Fever.—The average stay in the hospital for scarlet fever was 50 days. No fewer than 18 of the cases were complicated with rhinitis. No case is discharged from the hospital with discharge from the nose or ear, or enlargement of the sub-maxillary glands.”

Diphtheria.—Seven deaths occurred, death in each case being due to cardiac complication. The average stay in hospital was 36 days. No case is discharged until three successive swabs from the nose and throat have been examined.

The cost of maintenance per patient works out at 3/8 per day, and the cost of food for patients and staff at 8d. per head per day.

Adoptive Acts.—The Public Health Acts adopted by the Council are as follows:—Public Health Acts (Amendment) Act, 1890; Infectious Disease Prevention Act, 1890, and the Public Health Acts (Amendment) Act, 1907.

Bacteriological Work.—Three hundred and eight specimens were sent to the Birmingham University, and 1,878 were examined in the Borough Laboratory.

Disinfection.—" At present disinfection of bedding and clothing is done in an unsatisfactory manner by spraying. This method is not only uncertain in its results, but inconvenient to the people who have often to sleep on the bedding within a short space of time after disinfection. Disinfection by steam would not only be much more efficient as far as the destruction of infection is concerned, but would save the people much inconvenience and labour."

Rooms are disinfected by spraying walls, floor, furniture and bedding with formalin. After spraying, the room is kept closed for 12 hours. Washable clothing are steeped in a disinfectant.

" A steam disinfector combined with a cleansing station is one of the most important sanitary matters which the Council have got to deal with, and it is to be hoped that before long they will take the question into their serious consideration and by its provision assist materially in the sanitary administration of the town."

TEME (Rural).

Medical Officer of Health JOHN H. K. GRIFFITHS, M.B.

<i>Area in Acres</i>	..	..	..	..	..	..	23,090
<i>Population</i>	at 1911 Census	..	..	..	..	..	1,644
<i>Number of inhabited houses</i> ..	..	..	..	..	..	..	382
<i>Number of persons per house</i> ..	..	..	..	..	..	..	4.3

General Character of the District.

" The District is mountainous and purely agricultural. The majority of the inhabitants are engaged in agriculture ; there are five parishes in the district, but there is only one village of which the population is as much as 400, viz : Bucknell."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	14.5	.0	.60	1.21	1.82	.0	.60	93	19.4

Infectious Disease.—Two cases of scarlet fever were notified, and one was removed to the Isolation Hospital.

Two cases of pulmonary tuberculosis were notified, one was fatal and the other was removed to the Sanatorium, where he derived great benefit. The houses were disinfected.

Water Supply.—" Bucknell is still without a safe and adequate supply, but it would seem that the general desire of the Bucknell people is to continue under the present conditions."

Drainage and Sewerage.—There is no system of sewerage. The sewage generally finds its way into a ditch or a small watercourse.

Excrement Disposal—is by means of privies which are emptied on to gardens or land.

Scavenging.—There is no organised system.

Housing.—There is a sufficiency of houses. No overcrowding has been noticed. Houses are in an average state of repair.

Hospital Accommodation.—"This has been sufficient."

Midwives.—There is a scarcity of midwives in the district.

Milk Supply.—There is one milkseller in the district. It is often difficult for poor people to get milk in case of illness.

There is one bakehouse and one slaughter-house. Both have been inspected frequently and found sanitary.

The only workshops are blacksmiths' and wheelwrights' shops. They have been inspected and found clean and sanitary.

WELLINGTON (Urban).

Medical Officer of Health A. E. WHITE, M.B., D.P.H.

<i>Area in Acres</i> .. ..	.. ..	.. ..	.. ..	700
<i>Population</i>	at 1911 Census	.. ..	.. ..	7,820
<i>Number of inhabited houses</i> .. ..	"	.. ..	.. ..	1,721
<i>Number of persons per house</i> .. ..	"	.. ..	.. ..	4.5

General Character of the District.

"Wellington lies on the southern border of the Shropshire plain, with the Wrekin and Ercall Hills to the south of it. It covers 684 acres. The subsoil is clay and gravel overlaying the lower layers of the red sandstone. It is the centre of a large agricultural district, and serves as the market town for it and the neighbouring mining and manufacturing districts. Its chief industries are brewing, malting, manufacture of furniture and all kinds of woodwork and agricultural implements and ironwork. In addition several large and well-equipped boarding schools are carried on, and add materially to its prosperity.

"The water supply is under the control of the Council, who have water rights over some of the surrounding rural area. The sewers are for the most part modern, and the outfall is about half-a-mile from the border of the district."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	13.1	.50	.37	.12	1.25	.75	.62	78	22.2

Infantile Mortality.—"The causes assigned to these infants' deaths were premature birth 2, debility or marasmus 6, epidemic enteritis 3, and bronchitis 2. It may be asserted that without a doubt the majority of these deaths were due to preventable causes, and that improper feeding and clothing, the result of ignorance, laziness and poverty, are chiefly responsible."

Infectious Disease.—Fifteen cases of diphtheria, 1 of scarlet fever, 1 of erysipelas, 7 of pulmonary tuberculosis and 3 of other forms of tuberculosis were notified. The schools were not to any extent instrumental in the spreading of diphtheria. Dr. White says that his inquiries led him to the conclusion that the disease was prevalent for so long on account of mild unsuspected cases in adults.

No school was closed during the year for infectious disease.

Isolation Hospital Accommodation.—A Joint Hospital Committee is now in course of formation for an area including Wellington Urban.

Tuberculosis.—Three of the cases of pulmonary tuberculosis died, 3 were removed to the Sanatorium; the other case left the district. There is no health visitor in the district, and it is not possible for officers of the Sanitary Authority to pay special periodic visits.

Housing Conditions.—Of the 131 houses inspected under the Housing and Town Planning Act, 4 were represented as unfit for habitation and closing orders made. Two were closed and 2 were allowed to remain tenanted after part of the necessary work was done.

"In 69 instances the necessary repairs have been carried out, and in 23 the work is slowly being carried out, leaving 24 in which no attempt has been made to repair the houses.

"Many of these houses could be dealt with under Section 14 and 15 of the Act, and in view of the difficulty to get the repairs carried out thoroughly in many instances this seems the best way to proceed. When the tenancy commenced after the passing of the Act and the work is not done in 21 days after notice has been given, then the Surveyor should have the work carried out under his supervision and charge the owner with the cost."

"During the year 19 houses were erected in the district, but only three of these were of the cottage type. The 22 cottages which the Council are building will be a great boon to the district, and will enable more active measures to be taken in regard to some of the worst cottages. Overcrowding was found and dealt with in six houses."

Water Supply.—The upland supply was insufficient during the year, and ten million gallons were pumped from the bore hole, 56 million gallons being supplied from the gathering ground. Bacteriological examinations made of the filtered water on two occasions showed it to be quite satisfactory.

Sewage and Drainage.—The sewage works continue to give a satisfactory effluent.

Fifteen privies have been converted to water-closets during the year, leaving about 259 to be dealt with.

Removal of House Refuse.—"The abolition of ashpits makes slow progress, only ten galvanized iron receptacles being provided in old houses during the year." ". . . The tip that is in use for the disposal of ashes and rubbish has become unsightly and a nuisance in several ways, and requires to be abolished and a destructor substituted. This matter has been under consideration of the Council, but the financial burdens that the town are undertaking for other purposes has made its postponement necessary."

Factories and Workshops.—Seventy-eight inspections were made and 7 notices served. The bakehouses are all clean and satisfactory.

Dairies and Cowsheds.—There are 21 cowkeepers and milksellers on the register. The cowsheds, 10 in number, have been frequently inspected and no serious defects have been noted.

Slaughter-houses are in a satisfactory condition. They are frequently visited and the quality of meat is usually very good.

WELLINGTON (Rural).

<i>Medical Officer of Health</i>	..	..	W. T. HAWTHORN, M.R.C.S.
<i>Area in Acres</i>	..	..	.. 33,472
<i>Population</i>	at 1911	<i>Census</i>	 11,091
<i>Number of inhabited houses</i>	..	..	.. 2,433
<i>Number of persons per house</i>	..	..	.. 4.5

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	11.4	.36	.63	.0	.81	1.26	1.35	80	20.1

Infectious Disease.—Fifteen cases of scarlet fever, 5 of erysipelas, 16 of diphtheria, one of puerperal fever, and 101 of measles were notified. One school was closed on account of scarlet fever and one on account of measles.

Extension of the *water supply* to Red Lake and the upper portion of the Wellington Rural Parish is now arranged for.

“A dispute having arisen as to the quality of the water supplied to Hadley, notices served were not enforced until further analysis had been made; the analysis is now satisfactory and Notices should be enforced.”

The *sewage schemes* for Admaston and Hadley work satisfactorily, but nothing has been done with regard to the drainage of Ketley. This should have immediate attention.

There are 15 *slaughter-houses* in the district, and 63 visits have been paid.

There are 36 *milksellers* and 53 visits have been paid. The premises are fairly satisfactory.

There are 10 *bakehouses* and 27 *workshops* on the register.

The *housing accommodation* so far as the same has been inspected is fairly satisfactory. Three cases of *overcrowding* were reported and have been abated.

There is no system of *scavenging* in the district.

WEM (Urban).

Medical Officer of Health .. JOHN DALLEWY, L.R.C.P., M.R.C.S.

<i>Area in Acres</i>	452
<i>Population</i>	at 1911 Census 2,273
<i>Number of inhabited houses</i>	509
<i>Number of persons per house</i>	4.4

General Character of the District.

"The town of Wem is situated in the centre of an agricultural district, and is made up of a number of good houses, shops, cottages, and some Public Buildings.

"There is a Brewery and also a Tannery in the town.

"The town is paved, and is lighted with gas.

"The Union Workhouse is situated within the district.

"Two Cemeteries are in use, one on the Whitchurch road, about $4\frac{1}{2}$ acres in extent, and a smaller one in Chapel Street, of about a quarter of an acre.

"The site of the town is flat ground with sandy subsoil, situated from 264 to 270 feet above sea level.

"An ample water supply and good drainage are provided.

"The Wem Urban District comprises an area of 453 acres, and at the Census of 1911 had a population of 2,273.

"By Local Government Board Order dated April 1st, 1900, the ancient Civil Parish of Wem was divided into two parishes, Urban and Rural. Under provisions of the Local Government Act, 1894, by the same Order, the Urban Parish was constituted an Urban District, and the town is now governed by a District Council."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	10.8	.0	.0	.0	.86	1.73	.86	68	25.1

Infectious Disease.—Two cases of diphtheria, 9 of scarlet fever and 1 of erysipelas were notified.

Diphtheria Antitoxin is supplied by the District Council for preventive purposes.

No cases of tuberculosis were notified during the year.

Disinfectants are supplied and disinfection carried out by the Sanitary Inspector by spraying at the end of the case. A steam disinfector is used for bedding, etc., on the advice of the Medical Officer of Health.

Hospital Accommodation.—There is no isolation hospital in the district except for small-pox.

Water Supply is abundant and of good quality.

House Accommodation is very good. One hundred and fifty-nine houses were inspected and one closing order was made.

Sewerage and Drainage.—The sewerage system continues to work well.

Removal and Disposal of house refuse is undertaken by the Sanitary Authority.

Slaughter-houses.—There are 8 on the register ; inspected regularly and found satisfactory.

Milk Supply.—The number of cowkeepers on the register is 14. The necessity for cleanliness in the collection of milk is insisted upon.

Factories and Workshops Act.—Workshops are inspected regularly. The bakehouses are satisfactory.

Permissive Powers.—By-laws are in force with regard to new streets and buildings, nuisances, slaughter-houses and common lodging houses.

WEM (Rural).

Medical Officer of Health .. JOHN DALLEWY, L.R.C.P., M.R.C.S.

<i>Area in Acres</i>	..	..	..	..	..	..	51,999
<i>Population</i>	at 1911	<i>Census</i>	..	..	..	..	8,373
<i>Number of inhabited houses</i>	..	..	..	..	..	..	1,940
<i>Number of persons per house</i>	..	..	..	..	..	..	4.3

General Character of the District.

"Wem Rural District is composed of the parishes of Wem Rural, Broughton, Clive, Grinshill, Lee Brockhurst, Loppington, Moreton Corbet, Prees, Shawbury, Stanton-on-Hine-Heath, Weston and Wixhill, and Whixall.

"The total population is 8,373. There are 1,940 inhabited houses.

"The District is an agricultural one."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	13.1	.47	.47	.23	.47	.35	1.43	72	21.5

The nurses in the district all carry out their duties in a satisfactory manner, and the mothers and infants are well taken care of.

Infectious Disease.—Three cases of diphtheria, 15 of scarlet fever, 2 of enteric fever, 6 of pulmonary tuberculosis, and 1 of other forms of tuberculosis were notified.

Diphtheria antitoxin is supplied by the District Council for preventive purposes.

The cases of scarlet fever were all of a mild type.

One of the two cases of enteric fever died. The infection in both cases appears to have been contracted outside the district.

Pulmonary Tuberculosis.—Of the six cases notified, two died. All cases were visited by the Medical Officer of Health and the Sanitary Inspector.

Disinfection.—Disinfectants are supplied and the Sanitary Inspector disinfects the house at the termination of the case. The steam disinfecter is used on the advice of the Medical Officer of Health, to disinfect bedding, clothes, etc.

Hospital Accommodation.—There is a hospital for small-pox but no hospital for other infectious disease.

Water Supply.—The County Medical Officer of Health reported upon the water supplies of the parishes of Broughton, Clive, Grinshill, Lee Brockhurst, Loppington, Moreton Corbet, Shawbury, Stanton-on-Hine-Heath, and Weston and Wixhill in 1903, and in 1904 a further report was issued by him on the water supplies of the parishes of Whixall, Wem and Prees. The recommendations in these reports are being carried out from time to time.

Tilley has been supplied from the Urban Council's mains.

Whixall.—Plans have been submitted to the Local Government Board for the provision of nine pumps.

Prees.—This question has been before the Council several times. A scheme has been submitted for supplying the district from a private source.

House Accommodation is on the whole fairly good.

Housing and Town Planning Act.—One hundred and forty-eight houses were inspected, and one closing order was made. The reports are brought before the Council at their monthly meetings.

Milk Supply.—There are 125 cowkeepers and milksellers on the register. The premises have all been inspected and all notices have been complied with. The importance of cleanliness is insisted upon.

Factories and Workshops.—There are 68 workshops in the district, all of which have been inspected.

WENLOCK (Urban).

Medical Officer of Health M. GEPP, L.R.C.P.E., D.P.H.

<i>Area in Acres</i>	..	..	..	..	..	..	22,657
<i>Population</i>	at 1911	<i>Census</i>	..	..	..	..	15,244
<i>Number of inhabited houses</i>	..	..	..	..	..	..	3,548
<i>Number of persons per house</i>	..	..	..	..	..	..	4.3

Physical Features and General Character of the District.

" The District comprises 22,522 acres, exclusive of water, being the largest Borough in area in the country. This area is of very irregular outline, but is, roughly, some ten miles in greatest length, from north to south-west, and has a mean breadth of some four miles, being narrowest where the Severn traversing the district from west to east, makes a natural division, the part lying to the south of the river having three or four times the area of the northern part, though with less than half the population.

" The District is for the most part a tableland lying at an elevation of from 400 to 600 feet or more; the Severn forming a deep cutting through this elevated land, its banks rising very steeply on either side from about 150 feet O.D. at the water level to the general height of about 500 feet O.D. The central and eastern part, nearly half the area, lies upon the coal measures. To the west the formation is the Wenlock and Ludlow beds of Silurian age, forming a considerable part of the southern division and extending also to a limited extent across the river in the northern division. Much of this ground lies in ridges with intervening valleys at a height of from 600 to 800 feet. At the southern extremity the old red sandstone occurs. The natural drainage is to the Severn, by small streams falling as a rule steeply into the river within the district, but the southern part of the southern area drains to the south by small streams which meet the Severn some distance outside the District.

" The district is in large part industrial, the chief industries being coal and iron mining, iron manufactures, and brick and tile works. There is also a large china factory. These industries are confined to the northern area together with a small part of the southern area near the river. The greater part of the southern area is entirely rural and agricultural, and thinly populated.

" For purposes of local administration the Borough is divided into four wards, each having a separate Sanitary Committee acting as the Sanitary Authority. These wards, with their area, population, and general character are as follows :—

Ward.	Area in Acres.	Census Population 1911	Situation.	General Character.
Madeley	2797	8121	North-of-Severn ..	Urban and Industrial Coal and Iron.
Broseley	1962	3663	South-of-Severn ..	Urban and Industrial Brick and Tile.
Much Wenlock ..	8751	2148	South-of-Severn ..	Agricultural.
Barrow	9012	1312	Both sides of Severn	Agricultural.

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth rate
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	12.2	.13	.79	.13	.92	.92	.92	76	20.0

The population between the 1901 and 1911 Census decreased by 622 persons. The heaviest fall was in the Broseley Ward.

The birth-rate in the Borough was the lowest recorded.

The infantile mortality was comparatively low, "but the District is one in which in my opinion a system of health visiting, in connection with the adoption of the Notification of Births Act by the County Council would be useful in instructing and advising mothers in the care and feeding of infants and in reducing infant mortality."

Infectious Disease.—Thirty-eight cases of scarlet fever, 2 of diphtheria and 2 of puerperal fever were notified during the year. With two exceptions, scarlet fever did not spread in a house beyond the first person affected. Both diphtheria patients were supplied with antitoxin at public cost.

Diphtheria (Antitoxin) Order.—Arrangements are made for the free supply.

Five schools were closed on account of infectious disease.

Tuberculosis.—"Each Ward except Barrow shows a rate above that of the Shropshire Urban Districts. I have pointed out in former years that the death-rate from phthisis in the Borough showed no tendency to reduction, and I have attributed the comparatively high rate to conditions of bad housing and of poverty, assisted to some extent by certain industries associated with dust. The two last years, 1912 and 1913, have been below the average in the Borough, and if maintained this reduction will be very satisfactory.

"During the year 36 cases of pulmonary, and 13 of other forms of, tuberculosis, were notified under the Public Health (Tuberculosis) Regulations, 1912. These cases were not as a rule visited, except in fatal cases, when the Sanitary Inspector carried out or supervised disinfection and inspected the premises for defective conditions. Fifteen patients were admitted for treatment to the Shropshire Sanatorium, which is situated within the Borough."

Ophthalmia Neonatorum.—"What is required is that the Medical Officer of Health should be empowered to engage medical attendance and skilled nursing at the public cost, in any necessary case, the work of a nurse in a severe case being to apply treatment unremittingly for a few days, under the direction of a medical man." It is suggested that the Council should approach the Forester Trustees for this purpose.

Isolation Hospital.—For small-pox there is an iron hospital at the Batches, Broseley, with 8 beds. Referring to the Joint Hospital District recently formed, Dr. Gepp says:—"I would point out that provision for isolation, both of ordinary infectious disease and of cases of advanced phthisis is at least as necessary in the Borough as in the other Districts, and that conclusion in a large area for this purpose is the most economical way of making efficient provision. In my opinion the Borough would have been well advised to join the scheme."

Disinfection.—The Sanitary Inspector sprays and fumigates infected rooms, and disinfectants are supplied. The provision of a steam disinfecting apparatus is recommended.

Water Supply.—Broseley and Madeley Joint Scheme. The supply is from a deep well and boring in the Bunter beds at Harrington. The water has 16 degrees of hardness and is of great purity.

Much Wenlock.—The town is supplied from a deep well sunk in the Tannery field. The water is artesian and is derived from the shallow measures of the Wenlock limestone. It is now laid on to most houses and to several public standpipes. A deep bore was sunk in 1910 alongside the well, but was not successful.

The village of Bourton has a supply laid on by the owner.

In the remainder of the district, the water is from pumps and springs.

“Coincidentally with the laying on of the public supplies the death-rate showed a definite drop, which has been maintained consistently. Another satisfactory feature has been the extinction of enteric fever. The association of this disease in the Borough with the use of polluted river water or that of other impure sources has generally been close.”

Sewerage and Drainage.—A drainage scheme was carried out for the town of Much Wenlock in 1912, and marks a decided improvement in the sanitation of the town. “The Sanitary Inspector reports that 185 branches were brought up to the boundaries of properties and disconnecting traps fixed. Sixty-six private drains have been connected, and in cases where the existing drains were not satisfactory temporary connections were made, pending the reconstruction of the drains, which work has now been taken in hand.

“The sewers of the various other towns in the Borough are for the most part of old construction, and appear to be, generally speaking, drains laid originally to take surface water, or as in the case of the steep hillside of Ironbridge especially, culverted water-courses. There are at present no works of sewage treatment, the outfall of most of the main sewers being either directly into the Severn, or into streams which fall into the Severn within the district. The sewers being old, no flushing arrangements are provided, other than by surface water, and ventilation depends upon surface water openings, which are not as a rule trapped, and upon the fact that many sewers are culverted in short lengths and in other parts run into open half culvert channels.

“As regards the towns and townships of Ironbridge, Madeley, Coalbrookdale, Coalport, Broseley and Jackfield, I have stated my definite opinion that further necessary progress in sanitation depends upon proper sewerage being provided. The Local Government Board and the County Council have been pressing the Sanitary Committees concerned to obtain engineering assistance “with a view to ascertaining to what extent the present unsatisfactory condition of the sewerage in these two wards could be remedied at a reasonable cost.” The Broseley Sanitary Committee obtained engineering assistance and a report during the year.

“In my opinion the sewers require to be largely replaced or re-modelled, and extended, in order to provide efficient drainage for the requirements of the district, independently of any question of river pollution.”

Excrement Disposal and Scavenging.—“Certainly privies of old and objectionable type are in a very large majority, and as I have pointed out in previous reports no general action for their abolition has been possible in the absence of suitable sewerage facilities. No privies were converted to water-closets during the year. Seventy-three notices were served for repair or amendment of closets. “Drained privies” of very obnoxious character, are not infrequently met with. Being untrapped and unflushed the drains become very foul and freely ventilate most offensive gases through the closet seats.”

There is public scavenging of privies in the Madeley Ward. Elsewhere it is done by the owners or occupiers. The scavenging is done at long intervals, averaging in the Madeley Ward about once a year.

There is a public system of refuse collection in the Madeley Ward, including a weekly collection from movable bins and the scavenging of fixed ashpits on request.

Broseley Ward.—Monthly scavenging of about a dozen fixed public ashpits is provided by the Committee. There are very few movable receptacles in the Borough. The number of fixed ashpits is estimated at about a thousand, very few being in connection with privies.

Housing.—There is a high proportion of small houses, and the great majority are old and many are very old. Taken as a whole, the standard of houses is low and there is practically no building. "Back-to-back houses are very rare, but a good many houses lack through ventilation, in some cases this being due to their being imbedded at the back into the hillsides. The sanitary surroundings of cottages are very often unsatisfactory, due to the absence of paving of yards, to lack of sewerage or drainage facilities, and very generally to objectionable vault privies. Overcrowding is occasionally met with and is generally due to large families occupying small houses."

Housing Regulations.—"The progress of inspection has not been rapid so far; 83 houses were inspected in 1911, 32 in 1912, and 75 last year. Of the total number of 190 houses inspected during the three years, 41 remained under consideration at the end of last year. I would refer to my remarks in last year's Annual Report both as to the desirability of more rapid progress in Housing Inspection and also as to the special difficulties presented in the District."

No formal representations of unfitness were made.

Overcrowding.—The percentage of "overcrowded" houses is high compared with the rest of the Urban Districts, particularly the three-roomed tenements that are overcrowded. "The building of new houses both to provide for re-placing and worn-out and decaying old property, and for furnishing additional accommodation to relieve conditions of overcrowding would, if found practicable, offer the best solution of existing difficulties. The relative over-population of houses has had a probable relation to the higher incidence and death-rate of tuberculosis in the Borough."

Permissive Powers.—The Infectious Disease (Prevention) Act, 1890, the Public Health Acts (Amendment) Act, 1890 (except Part IV.), and Parts 2, 3, 4, and 5 of the Public Health Acts Amendment Act, 1907, have been adopted.

By-laws were made in 1905 in respect to common lodging houses and slaughter-houses.

Regulations as to Dairies, Cowsheds and Milkshops were adopted in 1905.

Slaughter-houses.—There are 17 in the Borough. They are not registered but are inspected periodically, but not regularly at times of slaughtering.

No tuberculous carcasses were found.

Common Lodging Houses.—There are 2 on the register; frequently inspected.

Food and Drugs.—Twenty samples of food and drugs were taken, of which two of milk were adulterated. In one case of slight adulteration a second sample was taken. Proceedings were taken in the other case. It was dismissed on payment of £1 9s. 6d. costs.

WHITCHURCH (Urban).

<i>Medical Officer of Health</i>	.. ..	M. GEPP, L.R.C.P.E., D.P.H.
<i>Area in Acres</i>	.. ..	4,783
<i>Population</i>	<i>at 1911 Census</i>	5,757
<i>Number of inhabited houses</i>	.. ..	1,314
<i>Number of persons per house</i>	.. ..	4.4

Physical Features and General Character.

"The Urban District lies within the northern border of the County, and comprises a considerable area of agricultural land surrounding the town of Whitchurch. The general elevation varies from about 270 feet to 350 feet above Ordnance Datum. The subsoil is the red marl of the new Red Sandstone. The town occupies the centre and higher part of the district, the fall of the ground being from south and east to west and north-west, and the natural drainage by small brooks leaving the district towards the north-west, as tributaries of the Dee. The centre of the town is old and compact, considerable extensions of more recent buildings existing along some of the main roads radiating from the town. The surrounding parts of the district are entirely rural and agricultural, extending some two or three miles to the north-east and south-west of the town, and to about a mile to north-west and south-east. Whitchurch is a market and residential town, and the land around is extensively employed for grazing and dairy farming. It is the centre and market of a large cheese making industry. There is a brewery, maltings, engineering works, a steam laundry and a creamery. A Secondary School for girls has been erected in the town by the County Council."

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	12.1	.34	.51	.17	.17	.85	.85	135	19 0

The birth-rate was even lower than that of 1912.

The infantile mortality rate was exceptionally heavy.

"The infant death-rate has fluctuated very much in recent years, the average for the past seven years being 103 per 1000 born against 101, the corresponding rate for Rural England. This average is certainly excessive and shows that there is scope for work to be done in the instruction and education of mothers in the feeding and care of infants. It may be hoped that the County Council, which for some time has had the Notification of Births Act under consideration, may shortly adopt it and organise a system of health visiting."

Infectious Disease.—Twenty-nine cases of scarlet fever, 3 of diphtheria, and one case of erysipelas were notified. The cases of scarlet fever occurred in 17 families, and were as a rule of a mild type. On account of the mildness of the disease a considerable number of the cases were missed for the first week or two. No school was specially involved. All cases were carefully investigated and a search made amongst school absentees for missed cases. Caution bills were distributed.

One of the cases of diphtheria was a teacher in an elementary school. She was supposed to have had simply quinsy. A swab was taken before she returned to school. Dr. Gepp says :—" This was a case of prolonged infection, which, unrecognised, would have been a source of grave danger in school."

Diphtheria Antitoxin.—Arrangements are in force for the supply of antitoxin.

Tuberculosis.—Five cases of pulmonary tuberculosis and one of other forms were notified. Some of the cases were visited by the Medical Officer of Health, and in fatal cases the premises were disinfected by the Sanitary Inspector. The Council have purchased two shelters of Taunton design for treatment at home. They were lent out to suitable cases and erected in the gardens by the Surveyor.

Isolation Accommodation.—There is no isolation hospital for ordinary infectious disease for use of the district. There is a Joint Isolation Hospital at Prees Higher Heath for small-pox, with 8 beds.

Disinfection.—The Sanitary Inspector sprays infected rooms in nearly all notified cases. Disinfectants are provided. An emergency steam disinfector has been purchased jointly with the Rural Council.

Water Supply.—The town has a public system of supply laid on to the houses. " The water was originally derived from a number of shallow wells sunk into the ' drift ' in grass land, near the pumping station. To these were added some years ago three bore holes sunk into beds of sand at points half a mile and more distant from the drift wells, this water being siphoned to the pumping station."

In 1908 :—" Eleven bore holes and six 3-inch copper tubes were put down to a depth of from 43 to 51 feet, and three new collecting wells were made in brickwork and cement. The result was very good, an additional yield of over 3,000 gallons per hour being secured."

A constant supply has been maintained throughout the year.

Sewerage and Drainage.—The town is well sewered on modern lines, the sewers being ventilated by 24 shafts in addition to surface grids. There are 5 flushing tanks. The outfall works are on Hadley farm and consist of a septic tank of 25,000 gallons, two smaller tanks and 70 acres of land for irrigation. Several small improvements were made to the outfall works during the year.

Excrement Disposal.—There are 1,065 water-closets, 22 pail or earth closets, and 238 privies. Within the limits of the town proper there are now only 65 privies. Nine were converted to water-closets during the year. The privies are of an insanitary type. Seventy-four have been converted to water-closets in the last 7 years. " The number now remaining in the town is comparatively small, and the Council should press on their extinction as rapidly as possible."

The scavenging of privies is effected by householders.

Removal of House Refuse.—" A system of public scavenging was begun by the Council in 1907, and extended year by year till in 1911 it included all the sewered area."

The collection is weekly with the exception of outlying areas, which are only scavenged fortnightly in the winter months. The public scavenging has effected a great improvement. All refuse middens and ashpits have been replaced by movable bins with 14 exceptions. There are now 457 covered galvanised bins and 723 galvanised iron pails or wooden boxes.

Housing.—In the centre of the town there is some overcrowding of old cottage property in yards and in one or two narrow streets, many of the houses being very old and practically worn out. Building appears to have quite kept pace with the increase of population. The 1911 Census shows that 240 houses were built in the intercensal period, and the population increased in the same period by 536 persons.

Housing Inspection.—Records are considered by the Council and orders made when necessary for work to be done. Work is mostly done under informal notices. A notable improvement was effected in two of the old yards during the year. The closing and demolition of houses in one yard enabled the houses in the adjoining yard to be dealt with satisfactorily.

Overcrowding.—The percentage of overcrowding shown in the table is not high, but some cases of serious overcrowding appear to exist and to need investigation.

Permissive Powers.—The Council has adopted Part III. of the Public Health Acts (Amendment) Act, 1890, and the Infectious Disease (Prevention) Act, 1890, is in force in the District, with the exception of sections 5, 6, 15, and 17.

The Public Health Acts Amendment Act, 1907, Parts 2, 3, 4, 5, 6, 7, and 8, has been adopted. The first four parts refer to sanitary matters.

By-laws are in force with respect to nuisances, new streets and buildings, slaughter-houses, common lodging houses, tents, vans, etc., used as habitations.

Common Lodging Houses—three on the register ; inspected regularly and kept clean and orderly.

Slaughter-houses—seven on the register ; inspected regularly and at times of slaughtering. No tuberculous carcases were found.

Dairies, Cowsheds, and Milkshops.—The Model Regulations are in force. There are 22 cowkeepers and milksellers on the register, and the premises are inspected periodically and found to be well kept.

WHITCHURCH (Rural).

<i>Medical Officer of Health</i>		..	..	M. GEPP, L.R.C.P.E., D.P.H.			
<i>Area in Acres</i>	..	..	..	..	..	..	11,702
<i>Population</i>			<i>at 1911 Census</i>	..	..	..	1,935
<i>Number of inhabited houses</i>			„	..	..	..	439
<i>Number of persons per house</i>			„	..	..	..	4.4

General Character of the District.

“ The District lies within the northern border of the County adjacent, along its northern boundary, to the Whitchurch Urban District. The general elevation is from 300 to 400 feet O.D., the contour being gently undulating. The subsoil is the red marl of the new Red Sandstone, with the exception of a small area in the south-east, where an outlier of the Lias occurs at Ightfield. There is generally a considerable thickness of morainial drift covering the strata. The natural drainage is by small streams to north and south, the water partings between the Weaver, Dee, and Severn river systems crossing the district. The district is entirely rural in character, and the population scattered, the small villages of Tilstock, Ash, Bronghall (all in the large parish of Whitchurch Rural), and Ightfield, comprising the main collection of houses. The land is largely employed for grazing and dairy farming. The district is naturally very healthy, the average death-rates for preceding years being low.”

Statistics.

Period.	Death-rates per 1000 population from							Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Diarrhoea and Enteritis.	Phthisis.	Other Tuberculous Diseases.	Bronchitis.	Pneumonia (all forms)	Cancer.		
1913	10.8	.0	.0	.0	1.54	.51	.51	26	20.0

The Infantile mortality rate was due to the death of one infant from premature birth.

Infectious Disease.—One case of scarlet fever was notified.

Diphtheria Anti-toxin.—Arrangements are made for the free supply of antitoxin for poor people.

Tuberculosis.—One case of pulmonary tuberculosis was notified and was admitted to the Shropshire Sanatorium.

Hospital Isolation.—There is a joint small-pox hospital at Prees Heath. There is no isolation accommodation for other infectious diseases.

Disinfection.—The Sanitary Inspector disinfects infected rooms. A spraying apparatus and formalin lamp are provided. A steam disinfecter has been bought to serve the Urban and Rural Districts.

Water Supply.—As described in previous reports, the Council has done much to improve village supplies.

Tilstock.—This supply has been improved by arrangements for daily pumping and by fixing a fifty gallon tank. On examination the water was found free from odour or taste.

Ash.—The supply to this village is laid on from a private source, supplying two residences. It has been extended to Church Road during the year.

Ightfield.—The principal property owner has provided a well and pump for houses (six) at the north end of the village.

Elsewhere the supplies are to individual houses and groups of houses from shallow wells or springs.

Drainage and Excrement Disposal.—Apart from combined drainage at Tilstock and Broughall, the drainage is that of individual houses.

There are 10 water-closets, 76 earth and pail closets, and 423 privies in the district. Not much conversion of privies into earth or pail closets has been done in recent years, and conversion in the case of defective privies is recommended.

Housing appears on the whole adequate in amount, and the condition of the cottages is generally fair.

Overcrowding.—There is little evidence of overcrowding in the district. The Sanitary Inspector reports that there are 7 houses in Whitchurch Rural Parish and 5 in Ightfield, empty.

Permissive Powers.—The Public Health Acts (Amendment) Acts, 1890 and 1907, are not adopted. The Infectious Disease (Prevention) Act, 1890, is adopted with the exception of sections 5, 6, 15, and 17. The Council have Urban powers enabling them to make by-laws with respect to nuisances, and new streets and buildings.

By-laws.—By-laws have been made with respect to private scavenging, common lodging houses, nuisances, and new streets and buildings.

Slaughter-houses—There are 2 ; inspected periodically and occasionally at times of slaughtering.

No tuberculous carcasses were found.